Draft Environmental Impact Statement

West Shore Residences

145 West Shore Road Port Washington, Town of North Hempstead Nassau County, New York

PREPARED FOR

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August 2022

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DRAFT ENVIRONMENTAL IMPACT STATEMENT

WEST SHORE RESIDENCES 145 WEST SHORE ROAD HAMLET OF PORT WASHINGTON, TOWN OF NORTH HEMPSTEAD, NASSAU COUNTY, NEW YORK

PROJECT LOCATION	145 West Shore Road, Hamlet of Port Washington, Town of North Hempstead, Nassau County, New York
TAX MAP NUMBERS	NCTM: Section 6—Block 053—Lots 1005A and 1005B; p/o Section 6—Block 053—Lot 1035
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DATE OF PREPARATION:

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AVAILABILITY OF DOCUMENT:

This document is a Draft Environmental Impact Statement (DEIS) prepared by the above-referenced Applicant. Copies are available for public review and comment at the offices of the Lead Agency. This DEIS is also available electronically at www.northhempsteadny.gov/Planning

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Glossary/List of Acronyms/Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
ACM	Asbestos containing materials
amsl	Above mean sea level
ASTM	American Society of Testing and Materials
ASTs	Above ground storage tanks
ATRs	Automatic Traffic Recorders
AWQS	Ambient Water Quality Standards
Bala	Bala CSI Consulting Engineers, PLLC
BCA	Brownfield Cleanup Agreement
ВСР	Brownfield Cleanup Program
BER	Business environmental risk
BFE	Base Flood Elevation
bgs	Below grade surface
BMP	Best management practice
Btus	British thermal units
C&D	Construction and demolition
CAC	Climate Action Council
CAMP	Community Air Monitoring Plan
CBD	Centra business district
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFH	Cubic feet per hour
CGLI	Cleaner Greener Long Island
CH ₄	Methane
CLCPA	Climate Leadership and Community Protection Act
СМР	Coastal Management Program
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalents
СРР	Citizen Participation Plan

CRECs	Controlled recognized environmental conditions
CRIS	Cultural Resource Information System
CRRA	Community Risk and Resiliency Act
CWA	Clean Water Act
CWDHUS	Classification of Wetlands and Deepwater Habitats of the United States
СҮ	Cubic yards
dBA	Environmental sound that correlates with human subjective response
DEIS	Draft Environmental Impact Statement
DER	Division of Environmental Remediation
DER-10	Technical Guidance for Site Investigation and Remediation
DPF	Diesel particulate filters
DX A/C	Direct expansion air conditioning
E1UBL	Estuarine Subtidal, Unconsolidated Bottom, Subtidal
E2US2N	Estuarine Intertidal, Unconsolidated Shore, Sand, Regularly Flooded
ECCCNYS	Energy Conservation Construction Code of New York State
ECHO	Enforcement and Compliance History Online
ECNYS	Ecological Communities of New York State
ELAP	Environmental Laboratory Approval Program
EMS	Emergency medical service
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GHG	Greenhouse gas
GPR	Ground Penetrating Radar
GSF	Gross square-foot
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
HMP	Harbor Management Plan
HREC	Historic recognized environmental condition

HVAC	Heating, ventilation, and air conditioning			
IDA	Nassau County Industrial Development Agency			
IECC	International Energy Conservation Code			
IPaC	Information for Planning and Consultation			
ITE	Institute of Transportation Engineers			
kW	Kilowatts			
LAWES	Land Air Water Environmental Services			
LBP	Lead-based paint			
Ldn	Day-night average sound level			
LEED	Leadership in Energy and Environmental Design			
Leq	Energy-average sound level			
LIRR	Long Island Rail Road			
Lmax	Maximum Instantaneous A-weighted sound level			
LOS	Level of service			
LTANKS	Leaking Storage Tanks			
LZ	Littoral Zone			
MMtCO ₂ e	Million metric tons of carbon dioxide equivalent			
MS4s	Municipal Separate Storm Sewer Systems			
MT	Metric ton			
MWh	Megawatt hour			
N ₂ O	Nitrous oxide			
NAAQS	National Ambient Air Quality Standards			
NCDH	Nassau County Department of Health			
NCDPW	Nassau County Department of Public Works			
NCPHO	Nassau County Public Health Ordinance			
NFPA	National Fire Protection Association			
NMFS	National Marine Fisheries Service			
NOAA	National Oceanic and Atmospheric Administration			
NPDES	National Pollutant Discharge Elimination System			
NPL	National Priorities List			
NWI	National Wetland Inventory			
NYNHP	New York Natural Heritage Program			

NYSARAP	New York State Amphibian and Reptile Atlas Project
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOS	New York State Department of State
NYSDOT	New York State Department of Transportation
NYSERDA	New York State Energy Research and Development Authority
OPRHP	New York State Office of Parks, Recreation and Historic Preservation
OSHA	Occupational Health and Safety Administration
PCBs	Polychlorinated biphenyls
PFCs	Perfluorocarbons
PILOT	Payment in Lieu of Taxes
PSAC	Public school-aged children
PWGC	P.W. Grosser Consulting, Inc.
PWPD	Port Washington Police Department
PWWD	Port Washington Water District
R&D	Research and development
RAWP	Remedial Action Work Plan
RCRA	Resource Conservation and Recovery Act
RECs	Recognized environmental conditions
REV	Reforming the Energy Vision
ROD	Record of Decision
RRUSCOs	Restricted-Residential Soil Cleanup Objectives
SCFWH	Significant Coastal Fish and Wildlife Habitat
SEMS	Superfund Enterprise Management System
SEQRA	State Environmental Quality Review Act
SF	Square feet
SF ₆	Sulfur hexafluoride
SFHA	Special Flood Hazard Area
SGPA	Special Groundwater Protection Area
SGPIPA	Smart Growth Public Infrastructure Policy Act
SMPs	Stormwater management practices

SVOCs	Semi-Volatile Organic Compounds				
SWPPP	Stormwater Pollution Prevention Plan				
TIS	Traffic Impact Study				
ТРО	Thermoplastic Polyolefin				
UdA	Udipsamments, nearly level				
UFSD	Union Free School District				
USACE	United States Army Corps of Engineers				
USEPA	United States Environmental Protection Agency				
USFWS	United States Fish and Wildlife Service				
USGS	United States Geological Survey				
USTs	Underground storage tanks				
UUSCOs	Unrestricted Use Soil Cleanup Objectives				
VMT	Annual vehicle miles traveled				
VOCs	Volatile Organic Compounds				
W	Watt				
WPCD	Port Washington Water Pollution Control District				
WWTP	Port Washington Waste Water Treatment Plant				



1 Executive Summary

1.1 Introduction

This document is a Draft Environmental Impact Statement (DEIS) prepared in accordance with the State Environmental Quality Review Act (SEQRA) and its implementing regulations at 6 NYCRR Part 617 and the Final Scope adopted by the Town of North Hempstead Town Board ("Town Board") as lead agency on April 15, 2021. This document analyzes the potential significant adverse environmental impacts and proposed mitigation measures associated with an application by SLC Development, LLC ("the Applicant"), which involves a change of zone of the Subject Property from R-AAA to Multiple Residence (RM) and site plan approval, among other permits/approvals (the "Proposed Action"), to allow for the construction of a 176-unit residential building (the "Proposed Building") with associated parking and amenities (the "Proposed Project"). The DEIS also provides an analysis of reasonable alternatives as required by SEQRA and as identified in the Final Scope.

West Shore Residences is located at 145 West Shore Road, in the Hamlet of Port Washington, Town of North Hempstead, Nassau County, New York (the "Subject Property"). The Subject Property also encompasses the adjacent Town-owned Lot 1035 as accessory offstreet parking, in accordance with the Terms of Town Resolution No. 454-2008.

This *Executive Summary* is designed to solely provide an overview of the Proposed Action, the potential significant adverse impacts identified, mitigation measures proposed, and alternatives considered. Review of the *Executive Summary* is not a substitute for a full evaluation of the Proposed Action presented in **Section 2** through **Section 7** of this DEIS.

1.2 Description of the Proposed Action

1.2.1 Project Description and Setting

1.2.1.1 Summary of Existing Conditions

The 7.17-acre Subject Property (2.69 acres above mean high water [MHW] and 4.48 acres below MHW) is located on the east side of West Shore Road (a County-owned arterial

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thoroughfare), adjacent to Hempstead Harbor, at 145 West Shore Road, in the hamlet of Port Washington. It is shown on the Nassau County Land and Tax Map as Section 6—Block 053—Lots 1005A (2.04± acres controlled by the Applicant) and 1005B (5.13± acres currently titled in the Town of North Hempstead). While the site is situated in Town's Residence AAA (R-AAA) zoning district, it is, and has been since at least 1936, developed with industrial uses. The Subject Property is currently improved with various structures, including an earth-filled pier/concrete platform, a masonry storage building, and remains of a wooden pier, all associated with an industrial use (i.e., construction/ landscape supply storage). Vehicular access to the site is from one single curb-cut on West Shore Road. Additionally, a portion of the North Hempstead Beach Park (Section 6—Block 053—Lot 1035), which is proposed to be developed for parking, currently contains park vehicle storage/parking.

The immediate vicinity is characterized by large public recreational areas to the west and south with one remaining industrial use to the immediate north; Hempstead Harbor to the east and residential development to the north. Large open spaces include the North Hempstead Aerodrome to the west, the Harbor Links golf course to the southwest, and North Hempstead Beach Park to the south.

The Subject Property is located within the jurisdiction of the following service providers/utilities:

School District:	Port Washington Union Free School District			
Fire:	Port Washington Fire Department			
Ambulance:	Port Washington Fire Department/Nassau County Emergency Ambulance Bureau			
Police:	Port Washington Police Department			
Water:	Port Washington Water District			
Sewer:	Out-of-district connection to Port Washington Water Pollution Control District, Nassau County Sewer District or other sewer system			
Electricity:	PSEG Long Island			
Natural Gas:	National Grid			

1.2.1.2 Proposed Action and Project Description

As indicated above, the Proposed Action involves a change of zone of the Subject Property from R-AAA to Multiple Residence (RM) and site plan approval to allow for the construction of a 176-unit residential building, consisting of five residential stories above two parking levels (including one that is partially underground). The proposed 176-unit residential building would contain a mix of 80 one-bedroom units, 82 two-bedroom units and 14 threebedroom units of various sizes, including 17 affordable/workforce units. Based on this bedroom mix, a total of 378 new residents is projected. Vehicular access would be provided from one dual access drive at West Shore Road. The residential development would include an outdoor pool and spa for residents, situated within an outdoor seating area located on the north side of the proposed building. Other resident amenities include a pet spa (washing station), bicycle storage and an indoor fitness area adjacent to the outdoor pool and spa area. Site improvements/features include a comprehensive stormwater management system,

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site lighting and extensive landscaping. A shuttle would also be provided to and from the Port Washington Long Island Rail Road (LIRR) station and downtown Port Washington.

Additionally, as a public benefit, the Applicant is proposing to construct a public promenade and pier and a 20-30-slip marina (for various-sized boats, including one slip dedicated to Town emergency service provider use), connecting the proposed development with North Hempstead Beach Park, generally within lot 1005B.¹ The existing wooden pier and concrete platform would be removed and replaced with a new pier with outdoor amenities. A bulkhead is proposed at the head of the marina, adjacent to the residential building. Although not part of the Subject Property and not subject to the change of zone application, as an additional public benefit, the Applicant is also proposing to develop the adjacent Town-owned Lot 1035 as accessory off-street parking, in accordance with the Terms of Town Resolution No. 454-2008. The public waterfront access and adjacent North Hempstead Beach Park would be served by the additional parking.

The Proposed Project would be constructed in a single phase, to take place over a 30-month construction period.

1.2.1.3 History of the Property

The Subject Property was first developed sometime prior to 1900, when piers extending into Hempstead Harbor were constructed. In 1936, the property was identified as Metropolitan Sand & Gravel Corp. Historic records indicate that uses on the Subject Property prior to the current sand and gravel storage use included ship maintenance and a steel fabrication shop.

While most land under water is in the public domain and is not privately owned, New York State does, in fact, recognize private ownership of underwater lands. The State may convey land under water to a private property owner through Letters-Patent. In the case of the Subject Property, the land under water was conveyed by the State of New York to the current property owner's predecessor, J.B. King & Co., under Letters-Patent dated December 7, 1907. While the underwater land is in private ownership, the Applicant is not proposing to construct any part of the building over water or to reclaim/fill any submerged land. Instead, the proposal is to seek a variance in order to condense the development yield for the full site acreage (7.17± acres) onto the upland portion and preserve the land under water for public use. The use of the underwater land is proposed to be for a public marina and pier.

1.2.1.4 Site Remediation

Phase I and II Environmental Site Assessments (ESAs) were conducted to determine recognized environmental conditions (RECs) (including historic [HRECs], controlled [CRECs], and/or business [BERs] conditions) present at the Subject Property. In accordance with the recommendations of the Phase I ESA, Limited Phase II ESA and Supplemental Phase II ESA, implementation of the Proposed Action would require the completion of various remediation activities, as described in the **Subsurface Conditions** section of this Executive Summary.

The proposed pier, marina, and a portion of the public promenade to be included as part of the Proposed Project are located on Section 6, Block 53, Lot 1005B of the Nassau County Land and Tax Map, which is currently titled in the Town of North Hempstead. These public improvements are intended to be constructed and maintained by the Applicant in perpetuity, and dedicated to public use through a recorded covenant.

1.2.1.5 Purpose, Need and Benefits

The purpose of the Proposed Action is to replace the existing industrial use on the Subject Property with a multi-family development of 176 units that would result in, among other things, a remediation of the existing property, transformation of an industrial use into a residential use in accordance with the *Shared Vision Plan for the Port Washington Peninsula* (Vision Plan), development of affordable housing, and provision of other public benefits that would satisfy identified needs of the community.

Benefits of the redevelopment of the Subject Property that have been identified include, but are not limited to:

- > Extensive environmental cleanup of the Subject Property and reactivation of the east side of the Port Washington Peninsula.
- > Increased recreational/educational opportunities for the general public.
- > Conversion of a Brownfield site into a productive residential and recreational property.
- > Diversification of the area's housing stock by providing high-quality multi-family residential development that meets the documented need for additional housing options on Long Island.
- > Improvement to existing sewer infrastructure that would benefit North Hempstead Beach Park.
- > Addition of provisions for emergency service providers such as the Port Washington Fire Department and Police Department.

1.2.1.6 Required Permits and Approvals

The Proposed Action is expected to require the following permits and approvals:

Agency	Permit/Approval
North Hempstead Town Board	Change of Zone, Site Plan Approval
North Hempstead Board of Zoning Appeals	Area Variances: height; buffer area; parking; front yard; side yard; rear yard; density; lot coverage; recreational area; floor area
North Hempstead Building Department	Building Permit
North Hempstead Town Clerk	Structures-in-Waterways Permit
North Hempstead Waterfront Advisory Committee	Review of Pier and Marina
Port Washington Fire Department	Sprinkler System, Emergency Egress, Site Plan Review
Nassau County Planning Commission	GML 239-m Referral
Nassau County Department of Public Works	GML 239-f Review and Approval
Nassau County Fire Marshal	Sprinkler System, Emergency Egress, Site Plan
Nassau County Health Department	Stormwater Management, Backflow Prevention

New York State Department of Environmental Conservation	SPDES General Permit for Stormwater Discharges for Construction Activities (GP-0- 20-001); Article 25 Tidal Wetlands Permit; Section 401 Water Quality Certification; Protection of Waters Permit (Excavation & Fill in Navigable Waters; Docks, Moorings, or Platforms)			
New York State Department of State	Consistency Review with New York State Coastal Policies			
New York State Office of General Services	Permits (Lands Under Water; Docks, Moorings or Platforms)			
United States Army Corps of Engineers	Section 404 Clean Water Act; Section 10 Rivers & Harbors Act of 1899			
Port Washington Water District	Water Service Connection			
Port Washington Water Pollution Control District	Sewer Service Connection			
PSEG - Long Island	Electric Utility Connection			
National Grid	Natural Gas Connection			
Nassau County Industrial Development Agency	Financial Assistance			

1.3 Potential Impacts and Proposed Mitigation Measures

This section briefly discusses the environmental setting and summarizes the potential significant adverse impacts of the Proposed Action, and mitigation measures proposed to reduce or eliminate such impacts.

1.3.1 Soils and Topography

1.3.1.1 Soils

The United States Department of Agriculture (USDA) *Web Soil Survey* (*Soil Survey*) indicates that the Subject Property contains soils mapped as Urban Land (Ug), Udipsamments, nearly level (UdA), Beaches, sand (Bc) and water (W). The portion of Lot 1035 to be redeveloped as part of the Proposed Action contains UdA and Ug soil/land types only.

The *Web Soil Survey* provides information regarding the potential limitations to development that different soil types may possess. However, with regard to the soil types found within the Subject Property and the portion of Lot 1035 included under the Proposed Action, the *Web Soil Survey* only provides information on the Urban land soil type. The upland portions of the Subject Property (i.e., those areas not classified as Water) are nearly entirely composed of previously disturbed soil/land types (i.e., Ug and UdA). The remaining portions of the Subject Property (Bc and W) may contain naturally occurring soils. However, the Proposed Action has been designed to minimize the amount of grading/land work within these portions of the Subject Property. The portion of Lot 1035 included as part of the Proposed Action is entirely composed of previously disturbed soil/land types (i.g. and UdA). Further, where provided,

the *Web Soil Survey* indicates that the soil types found on-site, and within Lot 1035, do not present any severe engineering or planning limitations. As such, throughout the majority of the Subject Property and all of Lot 1035, the original soil types do not exist at or near the surface.

A site-specific geotechnical investigation was performed by P.W. Grosser Consulting, Inc. (PWGC) in November and December 2020 to characterize soils on the Subject Property and describe potential engineering limitations. Land Air Water Environmental Services (LAWES) conducted soil boring drilling. The site-specific geotechnical investigation was performed within the Subject Property only and, thus, do not address soils within the portion of Lot 1035 included as part of the Proposed Action. Based on the results of the geotechnical report, PWGC made the following recommendations pertaining to the future installation of building foundations within the Subject Property.

- > Building foundations and floor slabs should be supported by a deep foundation system that extends through existing fills and loose silty sands. Ground floor slabs should be structurally supported by pile caps, grade beams, and additional piles driven as needed.
- > For slab on grade construction, surface soils should be removed to a minimum of one foot below the current ground surface and be proof rolled with a vibratory roller.
- Areas below all slabs on grade should be backfilled with free draining compacted backfill. A layer of three-quarter-inch gravel and a vapor barrier should be installed on top of the compacted backfill, to the underside of the slab.
- > If driven, concrete-filled steel pipe piles or tapered still piles are utilized, driving criteria should be determined using a wave equation analysis.
- > Based on the presence of uncontrolled fill with debris, some spudding or predrilling may be necessary to advance piles without damaging or misaligning same.
- Concrete should be placed as quickly as possible to avoid exposure of the foundation sub-soils to wetting, drying or freezing. Footings shall not be constructed on frozen or wet subgrade materials.

The Proposed Project would be undertaken in a manner that is consistent with these recommendations. As such, no significant adverse impacts associated with the installation of building foundations are expected.

1.3.1.2 Topography

A review of the United States Geological Survey (USGS) Topographic Map (Sea Cliff Quadrangle, 2016), USGS LiDAR elevation data, and the site-specific Topographic Survey (Scalice Land Surveying, December 2020), indicates that elevations at the Subject Property range from 4-to-30± feet above mean sea level (amsl). The USGS Topographic Map and USGS LiDAR elevation data indicate that elevations within the portion of Lot 1035 included under the Proposed Action range from 14-to-20± feet amsl. Elevation within the Subject Property is generally lowest along the shorefront of Hempstead Harbor, peaks near the middle of the Subject Property, then decreases gradually moving towards West Shore Road.

Although the site has been previously disturbed and graded, additional disturbance of soil and the grading of land would occur. Implementation of the Proposed Action would require the clearing of all existing structures. To achieve the proposed grades, it is anticipated that associated activities would require a net export of 15,500± cubic yards of soils and excavated materials from the Subject Property. All excavated materials would be disposed of in accordance with prevailing regulations.

As seen in the table below, the Proposed Action would not result in any significant alterations to the Subject Property's natural topography, as same has previously been substantially altered. The existing and proposed slopes upon the Subject Property can be see below:

Percent Slopes	Existing	Proposed		
0-10%	93%	98%		
10-15%	2%	1%		
15% or greater	5%	1%		

Mitigation

No significant adverse environmental impacts to soils and topography have been identified. However, the Proposed Action has incorporated numerous measures aimed at minimizing the potential impacts to soils and topography, including the following:

- > A Stormwater Pollution Prevention Plan (SWPPP) would be developed and implemented in accordance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) and the Town of North Hempstead.
- > As part of the SWPPP, a detailed erosion and sediment control plan, identifying the specific erosion and sediment control measures to be implemented, would be developed.
- > Drainage inlets would be protected from sediment build-up through the use of sediment barriers, sediment traps, etc., as required.
- > Clearing and grading would be scheduled in order to minimize the size of the exposed area and the length of time the area is exposed.
- > Sediment barriers (silt fences, hay bales, etc.) would be installed prior to any grading work along the limits of disturbance; same would be maintained for the duration of the proposed work.
- > Graded and stripped areas and stockpiles would be kept stabilized through the use of temporary seeding, or other effective covering, as required.
- > Fugitive dust control measures, such as the covering of stockpiles, temporary seeding, use of a water truck during extended dry periods, etc., would be implemented as needed.
- > A stabilized construction entrance would be maintained to prevent soil and loose debris from being tracked onto area roadways.

1.3.2 Subsurface Conditions

1.3.2.1 Phase I ESA

As discussed above, a Phase I ESA was conducted by VHB to determine RECs (including HRECs, CRECs, and/or BERs) present at the Subject Property. This was done through a review of available records and on-site investigation. The Phase I ESA noted that stockpiles of soils

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and construction and demolition (C&D) materials were observed on the northern-central and southern portions of the Subject Property. Additional soil stockpiles were present on the central portion of the Subject Property as well. Given the unknown quality of the stockpiles, soil sample collection in accordance with NYSDEC regulations prior to off-site disposal were recommended. A number of BERs were identified on-site, but none informed the recommendation of the REC. Based on the identified REC VHB recommended that a Phase II ESA be performed at the Subject Property.

1.3.2.2 Phase II ESA

As recommended by VHB, PWGC conducted a Limited Phase II ESA for the Subject Property to further evaluate potential impacts associated with the REC identified in VHB's Phase I ESA, as described above. In addition, based on PWGC's prior knowledge of the Subject Property, the following additional RECs, aside from the C&D stockpiles, were identified:

- A suspected abandoned floor-drain and sump/pit was identified in the steel fabrication building. (REC)
- Three suspected Underground Storage Tanks (USTs) were noted within the Subject Property. (REC)
- A fueling truck, as well as several abandoned vehicles, were identified on the Subject Property. (REC)
- Historical dumping, including washing machines and other types of debris, was reported to have occurred on the northern portion of the Subject Property. (REC)

In addition, the Limited Phase II ESA recommended that further actions be taken to remediate areas affected by petroleum-related contamination. It is also anticipated that there is an underground storage tank (UST) that will have to be removed prior to implementation of the Proposed Action. Overall, the Proposed Action would incorporate mitigation measures that would minimize, to the greatest extent feasible, the potential for significant adverse impacts associated with the remediation of the Subject Property.

1.3.2.3 Supplemental Phase II ESA

In June 2022, PWGC prepared a Supplemental Phase II ESA, the purpose of which was to further evaluate RECs identified in a Phase I ESA report prepared by VHB in 2020 and address data gaps from PWGC's Limited Phase II ESA prepared in 2020. Based on the findings from the sampling performed by PWGC in onshore and offshore locations, the Supplemental Phase II ESA recommended the following: the petroleum-impacted soil and groundwater that is present in the vicinity of this suspected UST should be addressed during removal of the tank in accordance with NYSDEC procedures. Additionally, due to the presence of metals in excess of Unrestricted Use Soil Cleanup Objectives (UUSCOs), a Soil and Materials Management Plan should be prepared to properly manage impacted soils in accordance with applicable federal, state, and local regulations.

1.3.2.4 Ongoing Remediation Activities

As noted in both the Phase I ESA and Limited Phase II ESA, the C&D stockpiles represent RECs that warrant removal from the Subject Property. In accordance with same, the current property owner removed the C&D stockpiles from the Subject Property in conformance with

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the prevailing regulations. Based upon information provided by PWGC and the Applicant, no other remediation activities have previously been completed or are currently being undertaken.

1.3.2.5 New York State Brownfield Cleanup Program

In association with the undertaking of the remediation activities described above, the Applicant will apply to the NYSDEC for the Subject Property to be entered into the New York State Brownfield Cleanup Program (BCP). By entering the BCP, remediation activities would be undertaken under the oversight of the NYSDEC, and the NYSDEC would ensure that the redevelopment of the Subject Property is undertaken in a manner that would not result in an adverse risk to human health or the environment. Based on the preliminary information available (i.e., the results of the Phase I ESA, Limited Phase II ESA and Supplemental Phase II ESA), there may be several different remedial options that could be utilized; these options would be evaluated based upon the results of the Remedial Investigation Work Plan, as well as the ability of the different remedial options to reduce or eliminate potential exposure pathways. Ultimately, the specific remediation activities to be undertaken would be determined under the BCP.

Mitigation

Through the inclusion in the BCP, all investigation and remediation activities would be performed under NYSDEC's oversight. Measures designed to remove the various RECs located on the Subject Property and preclude adverse risks to human health or the environment would be implemented and include establishment of a community participation plan; establishment of soil clean-up objectives; establishment of a community air monitoring program; use of construction fencing and on-site security to prevent trespassing; and installation of a truck wash station, as well as other erosion and sediment control measures. Should the Subject Property not be accepted into the BCP, the Applicant would undertake remediation activities under the oversight of the Nassau County Department of Health (NCDH) and NYSDEC, Overall, the Proposed Action would incorporate mitigation measures that would minimize, to the greatest extent feasible, the potential for significant adverse impacts associated with the remediation of the Subject Property.

1.3.3 Water Resources

1.3.3.1 Groundwater

Long Island is a sole source aquifer region, which means that groundwater is the only source of potable water available to meet the needs of the population. Therefore, to minimize potential impacts to groundwater resources, the Proposed Action would receive potable water from the Port Washington Water District. The Proposed Building would not directly utilize groundwater beneath the Subject Property for any reason. Additionally, sanitary waste generated by the Proposed Building would be accommodated via connection to the Port Washington Water Pollution Control District (as an out-of-district connection). Thus, there would be no on-site discharges of sanitary waste to groundwater. Accordingly, the potential for the Proposed Action to result in significant adverse impacts to groundwater is substantially limited. The Subject Property contains shallow groundwater conditions, which could have the potential to be impacted during excavation activities. Based on the shallow depth to groundwater, to mitigate against installation of building foundations and stormwater management structures reaching groundwater, said structures would be designed to meet or exceed the minimum separation distance above observed groundwater levels. Additionally, the proposed stormwater management system includes design measures to evenly distribute stormwater recharge and minimize the extent of impervious surfaces on-site.

There would be a need for limited dewatering during construction of the Proposed Project due to the required excavation and the use of driven deep pile foundations. Any required dewatering during construction would be conducted in accordance with applicable regulations. The construction manager would determine appropriate dewatering means and methods as necessary in accordance with prevailing regulations.

1.3.3.2 Stormwater

Currently, it appears the site does not contain any stormwater drains and, therefore, it is expected that stormwater runoff generated at the Subject Property infiltrates the ground through unpaved portions of the Subject Property and ultimately runs off to the east (i.e., into Hempstead Harbor). The Proposed Project would include the installation of a comprehensive stormwater management system consisting of a series of concrete leaching galleys to accommodate the drainage needs across the Subject Property. The site drainage system would include 248 three-foot-high leaching galleys and 202 five-foot-high leaching galleys, with a total storage capacity of 56,128± cubic feet (cf), providing for a total of five inches of storage on the Subject Property. The Proposed Action would result in a 0.96±-acre decrease in impervious surfaces and a 0.21±-acre increase in pervious lawn/landscaped areas. Due to the overall increase in pervious surface coverage, the Proposed Action would be expected to result in a net decrease in the amount of stormwater runoff generated onsite. Implementation of the stormwater management system would ensure that the Subject Property meets all local, county, and state stormwater regulations.

Based upon a comprehensive review of historical water quality data, pollutant loading contributions, development regulations, and development patterns, the *Water Quality Improvement Plan for Hempstead Harbor* (Coastal Environmental Services, May 1998) recommended a number of management and restoration measures aimed at the long-term maintenance of Hempstead Harbor's water quality. As one of its Source Control Strategies, the Water Quality Improvement Plan for Hempstead Harbor makes the following recommendation: *"Minimize site disturbance and promote alternative, environmentally friendly landscaping techniques to decrease the potential for soil erosion, decrease pesticide and fertilizer use, and help conserve water."* The Proposed Action would utilize erosion and sedimentation. Further, the Proposed Action would involve a nominal amount (0.46± acres) of landscaping, and would utilize relatively low-maintenance, native plant species, which reduce irrigation needs. In addition, the Proposed Action would capture stormwater runoff to the extent practicable and utilize same for irrigation purposes, thereby offsetting some, if not all, of the Proposed Action's irrigation demands.

Overall, the Proposed Project is not anticipated to result in stormwater impacts as a result of proper drainage system design, site grading, and implementation of proper erosion and

sediment control measures. The Proposed Action would decrease the potential for soil erosion and would minimize irrigation demands to help conserve and protect water.

1.3.3.3 Floodplains

Portions of the Subject Property are located within special flood hazard area (SFHA) Zones AE and VE. Under the Proposed Action, portions of the proposed residential building would be located within Zone VE, as would the entirety of the proposed promenade, pier, and marina. The Proposed Action is therefore subject to the provisions of Chapter 21 of the Town Code. Furthermore, as per Community Risk and Resiliency Act (CRRA) data, sea level could rise by a maximum of approximately 72 inches by the year 2100 under the "high" condition. However, this projection reflects the most extreme scenario. The Proposed Action would be consistent with the relevant flood zone building requirements of the Town of North Hempstead, to the greatest extent practicable. Further, the Proposed Action would not result in the alteration of existing floodplains, nor would it alter existing base flood elevations (BFEs). Thus, no significant adverse flooding impacts are anticipated.

Mitigation

Though no significant adverse impacts to water resources have been identified, various measures have been incorporated into the overall project design to ensure compliance with the prevailing regulations and relevant management plans, including the following:

- A SWPPP would be developed and implemented prior to the start of any construction activities, which would be reviewed and accepted by the Town for consistency with all relevant requirements.
- > The SWPPP would include a detailed erosion and sediment control plan identifying the specific erosion and sediment control measures to be implemented.
- > Drainage infrastructure would be installed first during construction to minimize potential for off-site stormwater discharges.
- > Site remediation activities would be undertaken, removing potentially hazardous groundwater contaminants from the Subject Property.
- > Sustainable practices, such as cisterns and native plantings, will be utilized to capture stormwater runoff and minimize the need for irrigation.

1.3.4 Ecological Resources

1.3.4.1 Terrestrial Habitats, Flora, and Fauna

The Subject Property is located on the western shore of Hempstead Harbor and also includes underwater lands within the harbor, which is an approximately 1,500-acre estuarine embayment that is connected to Long Island Sound to the north. As an estuary, Hempstead Harbor is an interface zone where saline waters from Long Island Sound mix with freshwater from the adjacent uplands within the watershed surrounding the harbor via creeks, overland flow, stormwater discharges, and groundwater inputs. Implementation of the Proposed Action would result in the demolition/removal of the existing site features and limited vegetation at the terrestrial portions of the Subject Property. Due to impervious or otherwise largely unvegetated surfaces and disturbed conditions, high levels of human presence and

activity, the buildings, pavement, construction supply stockpiles, dilapidated shoreline structures, and the concrete platform within Hempstead Harbor that encompass the terrestrial areas of the Subject Property have poor habitat functional value. The observed and expected terrestrial fauna is composed primarily of bird species adapted to disturbed/developed conditions and human interaction. The site features are further designated by the New York Natural Heritage Program (NYNHP) as unranked cultural communities. Moreover, the limited areas of existing vegetation at the Subject Property are composed of a low diversity flora dominated by a number of non-native/invasive species. As a result, the Subject Property does not represent a significant source of vegetated habitat or native plant diversity. No significant adverse impacts to local or regional ecological communities or plant species are anticipated due to removal of the existing site features and limited vegetation.

Following construction, it is anticipated that most resident wildlife species would reoccupy the Subject Property. Due to the quantitative and qualitative improvements of available vegetated habitat, population densities for most resident avian species would likely increase. Additionally, the proposed Landscape Plan incorporates a representative plant palette that includes an increase in the number of flowering native tree, shrub, and herbaceous plant species, and available feeding habitat for Monarch Butterfly populations. Overall, it is anticipated that a similar faunal assemblage of birds and other local wildlife adapted to cultural communities and human presence would occupy the terrestrial portions of the Subject Property following construction, but at increased population densities.

1.3.4.2 Wetland Habitats, Flora, and Fauna

The Proposed Action includes activities within the NYSDEC and the United States Army Corps of Engineers (USACE) jurisdictional areas associated with Hempstead Harbor. A NYSDEC Tidal Wetland permit is currently pending confirmation, as the Subject Property contains 4.48± acres of subtidal and intertidal wetlands of Hempstead Harbor. Existing structures in this wetland area consist of concrete-armored shoreline structures and the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris.

Temporary disturbance to wetland habitats and resident fauna at the Subject Property will occur during in-water work of the construction phase of the Proposed Action. Potential disturbance to tidal habitats located farther afield within Hempstead Harbor may also occur, due to water column turbidity, benthic siltation, and noise/vibration impacts from pile installation and other construction activities. To avoid or minimize the potential for adverse impacts to wetland habitats and fauna within Hempstead Harbor, all work, including structure demolition/removal, dredging, and bulkhead/pier/dock installation would be conducted according to industry best management practices (BMPs) designed to protect natural resources. As noted previously, the proposed work activities are subject to regulation and permitting by the NYSDEC and the USACE, which are the New York State and federal agencies, respectively.

The BMPs and other proactive measures proposed will also aid in the proactive protection of fish and wildlife fauna that may inhabit the Subject Property. These BMPs have been designed to avoid or minimize potential adverse construction impacts to resident species, New York State and federally listed species known to exist within Hempstead Harbor and the

vicinity of the Subject Property, and Essential Fish Habitat finfish species and their associated prey species.

With respect to permanent impacts to wetlands habitats and resident fauna of the Subject Property and Hempstead Harbor, the primary impact of the Proposed Action would be a net increase in tidal wetland habitat. The creation of new tidal wetlands will occur primarily through removal of the existing 27,980±-SF earth-filled pier that extends eastward from the Subject Property into Hempstead Harbor and replacement with a significantly smaller, 13,615 SF, earth-filled public pier at the same location. The existing 27,980± SF earth-filled pier that extends eastward from the Subject Property into Hempstead Harbor will be replaced by a 13,615 SF earth-filled public pier with a perimeter bulkhead at the same location, thereby expanding the tidal wetland area in the vicinity of the pier by 14,365 SF. Additionally, the Proposed Action would include the placement of 7,665 SF of fill and the removal of 14,596 SF of fill below the plane mean high water. This would result in a net expansion of 6,931 SF of tidal wetland area.

Overall, no significant adverse impacts to ecological resources are anticipated as a result of the Proposed Action, and quantitative and qualitative improvements to terrestrial and wetland ecological resources are anticipated.

Mitigation

Based on the foregoing, no significant adverse impacts to ecological resources are anticipated as a result of the Proposed Action. However, it should be noted that implementation of the Proposed Action would include the following ecological resources improvements:

- The expansion of wetland area will improve the wetland functional benefits of Hempstead Harbor.
- Demolition/removal of existing shoreline bulkheads and the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris.
- Remediation of subsurface contamination at terrestrial portions of the Subject Property under the Brownfield or similar cleanup program.
- Vegetated (lawn/landscaping) habitat at the Subject Property would increase from 0.25± acre to 0.46± acre, and would include native tree, shrub, and herbaceous plant varieties.
- The proposed Landscape Plan includes a representative plant palette that includes an increase in the number of flowering native tree, shrub, and herbaceous plant species, and available feeding habitat for Monarch Butterfly.
- As the existing terrestrial flora of the Subject Property is dominated by nonnative/invasive plant species, the Subject Property currently serves as a source for the spread of harmful plant species to properties within the general surrounding area. The removal of the existing non-native/invasive vegetation and installation of non-invasive species will prevent further spread of invasive plant species from the Subject Property to neighboring properties.

The installation of mussel beds will help filter out excess nitrogen, harmful algae, and bacteria from the harbor.

- > The Proposed Action would result in a reduction in impervious surfaces at the Subject Property of nearly one acre (0.93± acre).
- No stormwater management infrastructure currently exists at the Subject Property and untreated stormwater runoff carrying sediments and pollutants drains directly to Hempstead Harbor. The proposed stormwater management practices at the Subject Property would comply with all NYSDEC and local requirements for protection of wetland and aquatic resources, resulting in water quality improvements within Hempstead Harbor.
- > The use of water quality treatment of stormwater runoff, and the use of native plantings will minimize the need for irrigation in addition to the reclamation of rainwater for irrigation use. In addition, mussel beds will help filter out excess nitrogen, harmful algae, and bacteria from the harbor.
- > Mussel beds will be created to help filter out excess nitrogen from stormwater runoff, harmful algae, and bacteria from the harbor.

1.3.5 Zoning, Land Use, and Community Character

1.3.5.1 Land Use and Zoning

The Subject Property currently consists of a sand and gravel storage facility consisting of one concrete one-story building and one masonry storage building as well as large piles of sand and gravel with associated machinery. The Subject Property consists of approximately 2.69 acres above MHW and 4.48 acres below MHW. An existing, dilapidated wooden pier and steel dry dock extend out into the water within the bounds of the Subject Property.

The Subject Property is located within the Town of North Hempstead Residence AAA District (R-AAA), such that an industrial facility does not conform to the prevailing zoning of the site. Since the proposed multi-family residential use is not a permitted use under the existing R-AAA zoning district, the Proposed Action requires a change of zone, and the Applicant is requesting a rezoning of the Subject Property to the Town's Multiple Residence (RM) zoning district. The proposed zoning change would allow for the construction of the proposed 176unit multifamily development at the Subject Property, which would achieve a variety of local and regional land use and housing goals and benefits by providing more rental options within the Town and County. For example, the rezoning would serve as a catalyst for the extensive environmental cleanup of the property and its redevelopment in accordance with the Shared Vision Plan for Port Washington Peninsula. Also, the change of zone would permit redevelopment of the Subject Property that would include public access to the waterfront via the proposed promenade, pier and marina that would continue and complement the reactivation of the east side (North Hempstead Beach Park) of the Port Washington Peninsula, whereas no public access is currently available at this location. The rezoning would allow the provision of public amenities that would serve as a northward extension of the Hempstead Harbor Shoreline Trail, and that are consistent with the Town's overall master plan for Port Washington.

The proposed residential development would utilize the existing curb cut on West Shore Road. This driveway would provide entry to the at-grade parking area located adjacent to the proposed residential building and West Shore Road as well as provide entry to the below grade parking level. This driveway would also provide connection to the adjacent North Hempstead Beach Park parcel (Lot 1035) which would be developed, by the Applicant, for parking that will be shared with the proposed development. Under Town Resolution No. 454-2008, private development with limited public access to the waterfront would be authorized to use Lot 1035 for vehicular parking for the purpose of complying with parking requirements under any applicable zoning ordinance.

As proposed, the residential development would require variances from the Town Board of Zoning Appeals (BZA) for several of the bulk, dimensional and parking requirements for the RM zoning district. These variances include maximum height, minimum landscaped buffer area, minimum front yard, side yard and rear yard setbacks, minimum plot area and floor area, minimum recreational area, maximum lot coverage, and parking requirements.

1.3.5.2 Community Character

The Proposed Action would enhance the character of the Subject Property and the surrounding area by redeveloping a Brownfield industrial property with a vibrant residential development with a publicly accessible promenade, pier, and marina to meet the existing and future demand for such type of residential rental development, consistent with current trends on Long Island and in suburban areas throughout the country. Also, although, multifamily residences do not currently exist in the immediate vicinity along the West Shore Road corridor, the Proposed Project would be one of several multi-family residential buildings within close proximity to the Subject Property (i.e., the Amsterdam at Harborside and The Harborview).

The provision of high-quality, multi-family rental units within the Proposed Action would help meet the documented need for additional housing options on Long Island. The Long Island Index's study, *Long Island's Need for Multifamily Housing*, identifies the high housing costs on Long Island that are primarily due to insufficient housing stock, supporting the need for more housing options on Long Island. Additionally, the Proposed Action would support a housing type that is responsive to larger real estate trends toward an increasing, cross-generational demand for "surban" communities, or communities that provide a mix between suburban living and urban amenities including access to public transportation and downtown centers. Although the Subject Property is approximately 1.3 miles (as the crow flies) from the Port Washington LIRR, the Applicant intends to provide shuttle service to and from the train station and downtown as an amenity for the residents.

1.3.5.3 Relevant Comprehensive Plans and Studies

As part of the analysis of the Proposed Project's impact on land use, zoning and community character, several local land use plans were evaluated for consistency within. It was found that the Proposed Project is consistent or otherwise would result in no significant adverse impact with regard to the North Hempstead Beach Park Master Plan, Shared Vision Plan for Port Washington, Harbor Management Plan for Hempstead Harbor, 1998 Nassau County Comprehensive Master Plan and Nassau County Comprehensive Plan Update 2008: Trend Analysis.

Additionally, the *Town of North Hempstead Master Plan* ("*Town Master Plan*") was analyzed based on the aforementioned criteria. The *Town Master Plan* was prepared by the Town of North Hempstead Town Board and published over 30 years ago, in December 1989. While

some of the recommendations remain relevant, a 30-year-old plan cannot necessarily recognize and capture the needs of the changing demographics over this time period. The Proposed Action would be consistent with the general trends and recommendations made in the *Town Master Plan*. Refer to the **Zoning, Land Use and Community Character** section of this DEIS for an in-depth explanation of the trends and consistency of this project with the *Town Master Plan*.

Mitigation

No significant adverse impacts to zoning, land use, or community character have been identified. Therefore, no mitigation measures are proposed.

1.3.6 Traffic and Transportation

A Traffic Impact Study (TIS) was prepared by VHB to provide a comprehensive evaluation of the potential traffic impacts associated with the Proposed Project. The purpose of the TIS is to determine if there are any significant traffic impacts due to the Proposed Project and to evaluate and propose mitigation measures, if required. To determine potential traffic impacts, the following intersections and roadways were analyzed under existing, future No-Build and future Build conditions:

1.3.6.1 Principal Roadways

- > West Shore Road
- > Main Street (Roslyn)
- > Old Northern Boulevard
- > Beacon Hill Road
- > Port Washington Boulevard (NYS Route 101)
- > Longview Road
- > Main Street (Port Washington)
- > South Bayles Avenue.

1.3.6.2 Study Intersections

- > West Shore Road and Site Entrance (unsignalized)
- > West Shore Road and Harbor Park Drive South (signalized)
- > West Shore Road and Old Northern Boulevard (signalized)
- > Old Northern Boulevard and Main Street/Tower Place (signalized)
- > Beacon Hill Road and Longview Road/Summit Road (signalized)
- > Port Washington Boulevard and Main Street (signalized)
- > Port Washington Boulevard and Beacon Hill Road (signalized)
- > Main Street and Bayles Avenue (signalized)
- > South Bayles Avenue and Vanderventer Avenue (unsignalized)
- > Port Washington Boulevard and Longview Road (unsignalized).

1.3.6.3 No-Build Condition

No-Build traffic volumes include existing traffic and new traffic due to background traffic growth and other significant planned developments in the immediate vicinity of the Subject Property. The traffic analysis included several other planned developments in the vicinity. Additionally, VHB reviewed regional and local plans for any potential projects that would affect the capacity of the local roadways in the study area. None were identified. To account for general population and background growth, an annual growth factor was applied to existing traffic volumes, all of which result in the No-Build traffic condition for 2024.

1.3.6.4 Trip Generation

To estimate the traffic impact of the Proposed Project, it is necessary to determine the traffic volumes expected to be generated by the 176-unit multi-family development. The following is the trip generation estimate based on the ITE *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE) rates.

Project Component	Component Size	AM Pea	k Hour	PM Pea	k Hour	Saturday	/ Midday
Multifamily Residential ITE # 221 Mid-Rise	176 Units	Entering 26%	Exiting 74%	Entering 61%	Exiting 39%	Entering 50%	Exiting 50%
Totals		AM Peak Hour Trips		PM Peak Hour Trips		Saturday Midday Trips	
		Entering	Exiting	Entering	Exiting	Entering	Exiting
		16	47	47	30	38	39
		63		77		77	

Table 1-1 Trip Generation Estimates

The trips for the boat slips are seasonal and relatively small (two to six trips) during the peak hours on weekdays and are not reflected in the analysis. The trip generation associated with the Proposed Action indicates that the frequency of additional vehicles traveling on West Shore Road, when split by direction, would be in range of only one extra vehicle every two minutes.

1.3.6.5 Level of Service Analysis

Level of Service (LOS) analyses were conducted for the Existing (2021), future No-Build (2024), and future Build conditions (2024) for the study area intersections.

Weekday AM Peak Hour

For the weekday AM peak hour, all signalized intersections will operate at the same approach and overall intersection LOS during the Build condition as during the No-Build condition with all approaches and overall intersection LOS operating at LOS D or better. The one location where the approach LOS changes is the southbound approach at the Port Washington Boulevard & Main Street intersection which changes from LOS C (No-Build) to LOS D (Build) due to an increase in delay of less than three seconds. This increase in delay is nominal and the overall approach LOS is still considered to be acceptable at LOS D.

During the Build condition there is a lower percentage of heavy vehicles due to the redevelopment of the site from an industrial to a residential use. This is among the factors that contribute to the reduced delay on the Site Access approach between the No-Build and Build conditions.

Given the low increases in delay and the acceptable overall and intersection LOS (LOS D or better) at each of the study intersections, no improvements are recommended.

Weekday PM Peak Hour

For the weekday PM peak hour, the northbound approach to the intersection of Old Northern Boulevard and Main Street/Tower Place operates at LOS F in all three conditions. The increase in approach delay between the No-Build and Build conditions is four seconds of average vehicle delay. The intersection currently operates at overall intersection LOS D. This level of service will be maintained through the No-Build and Build conditions. Since the LOS F on the northbound approach is an existing condition with little increase in approach delay and the intersection maintains overall intersection LOS D conditions through the Build scenario, no mitigation is recommended as a result of the Proposed Project.

All other signalized intersections will operate at the same approach and overall intersection LOS during the Build and No-Build conditions except for the southbound approach at the Port Washington Boulevard and Main Street where the overall intersection shows a drop in LOS from LOS C (No-Build) to LOS D (Build) based on an increase in delay of less than two seconds. However, given that all intersections show an overall LOS D or better, which is considered acceptable, no improvements are proposed or necessary.

As indicated for the AM Peak Hour, during the Build condition there is a lower percentage of heavy vehicles due to the redevelopment of the site from an industrial to a residential use. This, among other factors, contributes to the reduced delay on the Site Access approach between the No-Build and Build conditions.

Given the low increases in delay and acceptable LOS (LOS D or better) at each of the unsignalized study intersections, no improvements are recommended.

Saturday Midday Peak Hour

During the Saturday midday peak hour, the northbound approach at the intersection of Old Northern Boulevard and Main Street/Tower Place operates at LOS E during all three conditions. The increase in approach delay between the No-Build and Build conditions is less than four seconds. The intersection currently operates at overall intersection LOS C conditions which will be maintained through the No-Build and Build conditions.

The TIS indicates that all other signalized intersections will operate at the same approach and overall intersection LOS during the Build condition and No-Build condition, except for the southbound approach at the Port Washington Boulevard and Main Street intersection which shows a change in LOS from the No-Build (LOS B) condition to the Build (LOS C) condition due to an increase in delay of less than one second. However, given that all
intersections show an overall intersection LOS D or better which is considered acceptable, no improvements are proposed.

Given the low increases in delay and acceptable LOS (LOS D or better) at each of the unsignalized study intersections, no improvements are recommended.

1.3.6.6 Parking

The Town Code requires that 2.25 parking spaces be provided for each residential dwelling. On that basis, the proposed 176 dwelling units would require 396 spaces. In addition, 32 stalls are required by Town Code for the proposed marina (1 stall per slip + 1 stall for each of 3 employees). As shown on the Site Plan, a total of 300 parking spaces will be provided for the site, which includes 242 spaces within the indoor parking levels under the building and 58 surface spaces to be shared by the marina and visitors to the public promenade and pier.

This surface parking is permitted based on Town of North Hempstead Town Board Resolution # 454-2008. This resolution provides that, in exchange for the Town's acquisition of a parcel (tax lot 1003) then owned by the owner of the Subject Property to complete its shore-line trail, the Town would authorize a portion of the parking lot on tax lot 1035 to be used for vehicular parking for the Subject Property "for the purpose of complying with the parking requirements under any applicable zoning ordinance" if the Subject Property is rezoned or utilized in a manner consistent with the Port Washington Vision Plan. It specifically contemplated a "private development with limited public access to the waterfront" including features such as a shorefront promenade or esplanade with benches" as is provided in this development.

Based on the foregoing, the Applicant is seeking a variance from the Town BZA to approve parking below the Code-prescribed levels. To demonstrate the adequacy of the proposed 300 parking spaces, data from *Parking Generation, 5th Edition*, published by ITE, which contains parking demand data for a wide range of land use categories, which in the case of this proposed development would be Land Use Code # 221 "Multifamily Housing (Mid-Rise), was used in the evaluation.

The proposed parking will serve the peak needs of the proposed development with parking also available for the public spaces. All parking associated with the marina and public spaces would occur in the surface parking areas while the peak parking demands of the residents can be met with the indoor parking.

1.3.6.7 Site Access and Internal Circulation

Site Access

In the Build condition, access to the Subject Property will be provided at the proposed driveway directly onto West Shore Road. The driveway will be designed to provide safe and efficient features for vehicular movements into and out of the Subject Property.

For drivers approaching the site from the north, the existing southbound left-turn lane will be extended to the south to the proposed site access location. The length of the modified left-turn lane will be of adequate length for vehicles waiting to make a left turn into the site.

For drivers approaching the site from the south, vehicles will be able to make a right turn directly into the site.

For drivers leaving the site, one exit lane will be provided which will consist of a shared lane for left turns and right turns. The site exit will be STOP-controlled and striped with a stop bar pavement marking to reinforce the regulation.

Sight Distance

Near the site driveway, West Shore Road is relatively straight with a consistent grade. Although the proposed site access is shifting slightly to the south of the existing driveway, it is not an appreciable difference that will have a significant impact on sight distance. Therefore, it appears there is adequate stopping sight distance for northbound and southbound vehicles, in accordance with the standards set forth in the "Highway Design Manual" published by the New York State Department of Transportation (NYSDOT) and the "Policy on Geometric Design of Highways and Streets" published by the American Association of State Highway and Transportation Officials (AASHTO).

Bicycle and Pedestrian Accommodations

Based on a review of the "Long Island Bikeways & Trailways Map" published by NYSDOT, and as confirmed by field observations, there are no signed bicycle routes or shared bicycle routes along West Shore Road. However, connections between the site and the adjoining Town and County parks will facilitate pedestrian and bicycle access between these locations. A sidewalk exists along the east side of West Shore Road, which will be retained to encourage bicycle use by the residents, and bike storage facilities will be provided within the building. It is also noted that the surface parking stalls to be provided as part of the redevelopment are intended for public use, with convenient pedestrian connections provided to the public pier and promenade at the rear (east) of the proposed residential building.

Public Transportation

The closest LIRR station is approximately two miles away, on Main Street in Port Washington. There are commuter parking lots operated by the Port Washington Parking District that adjoin the station and these are regularly filled on weekdays, until the current pandemic changed travel patterns, especially with regard to use of public transportation. To address the travel needs of the West Shore Residences, the Applicant will provide a shuttle bus to the Port Washington LIRR station, as well as to the Port Washington shopping area along the Main Street corridor. This shuttle service will reduce automobile trips in the area; however, in this analysis to present a conservative estimate of the potential impacts to traffic conditions, no credit was taken for the use of the shuttle bus in reducing trips generated by the Proposed Project.

1.3.6.8 Impacts of Marina on Boat Traffic/Mooring Infrastructure

The impact on the existing recreational boat traffic and existing mooring infrastructure will be negligible. The proposed marina comprises approximately 30 slips that would be solely for the use of the upland owners (with the exception that one slip will be dedicated to Town emergency service provider use) and comprise 500 linear feet of dock length, which

represents an increase of approximately 11-12 percent when considering other area marinas. With respect to the adjacent barging operations, the proposed marina does not infringe into the neighbors accessway to navigable waters. The recreational non-motorized watercraft currently launched from the public park beach also maintain access to navigable waters with the rowing club having access to public rowing pier that is positioned well-distant from the proposed marina.

1.3.6.9 Conclusions

Based on the results of the analyses conducted for the purpose of this report, the following conclusions have been developed.

- > The Proposed Project would, when split by direction, result in one additional vehicle every two minutes traveling on West Shore Road.
- > The traffic generated by the Proposed Project can be accommodated on the adjacent roadways and intersections without significant negative impacts to traffic conditions.
- > The proposed site access plan is well developed, sufficient to serve the needs of the site and will operate well with low delays.
- > The Proposed Project is not expected to unduly influence the rate of crash occurrence in the study area.
- The analysis performed shows that the project-generated traffic will result in no significant impact on the study intersections identified for this study. The study intersections will continue to operate similarly to the No Build condition with minimal increases in overall delay.
- > The parking to be provided for the site exceeds the projected peak parking demand based upon industry standards and is sufficient to meet the needs of the residences, the marina, and the public spaces.

Mitigation

The Proposed Project will not result in a significant adverse impact on the surrounding roadway network and no mitigation measures are warranted.

However, as noted above, the Applicant will provide a shuttle bus to the Port Washington LIRR station, as well as to the Port Washington shopping area along the Main Street corridor, which would reduce automobile trips in the area.

1.3.7 Community Facilities and Services

As per the Final Scope, reasonable alternative bedroom mix counts are analyzed in addition to the proposed program. The alternative bedroom mix counts are analyzed specifically for utility and infrastructure impacts, including sewage disposal and water supply. While the Proposed Action contains an almost even split between one- and two-bedroom units, one alternative leans toward more one-bedroom units and the other toward more two-bedroom units. All of the scenarios contain a small number of three-bedroom units, and also include the proposed marina.

Additionally, as discussed in the **Socioeconomics** section of the DEIS and described in more detail in the main text of the DEIS, the proposed development would generate property tax

revenue to numerous taxing jurisdictions (e.g., Town of North Hempstead, Nassau County, Port Washington UFSD), which would off-set the costs associated with providing the community services described in the subsections below.

1.3.7.1 Sewage Disposal

The Subject Property is currently not serviced by sanitary sewers. The intention is for sanitary waste that would be generated by the Proposed Project be disposed of via sewers. The total anticipated sewage flow from the proposed development is 46,650± gallons per day (gpd), based on the Nassau County Design Flow Standards.

Under the Proposed Action, it is proposed that the residential building will connect to either the Port Washington Water Pollution Control District (WPCD), Nassau County Sewer District or another local sewer district via construction of an on-site sewer main and lift station (pump station) on the southern end of the property. Consultations with the sewer districts noted above are expected to continue throughout the application process.

The calculations provided above for the projected sanitary wastewater accounts for the residential units within the development, as well as the amenities on the premises. This includes the swimming pool, laundry facilities and public fixtures in common areas. The unit calculations take into account amenities located within multi-family developments that are used only by residents and their guests. As noted above, at this time, consultation(s) with the Port Washington WPCD and other sewer agencies about connecting to the sewer system is ongoing.

It is noted that in addition to the calculated sewage generation for the Proposed Action, as indicated above, two potential alternative bedroom mix counts were analyzed to identify potential projected sewage generation. The proposed bedroom mix would generate slightly less total sewage than the potential alternative two-bedroom scenario and slightly more than the potential alternative one-bedroom scenario.

1.3.7.2 Water Supply

The Subject Property is currently supplied potable water by the Port Washington Water Department (PWWD), which, based on the current use, is minimal. Upon implementation of the Proposed Action, the Subject Property would continue to be serviced by this water purveyor. Anticipated water demand for the Proposed Project is approximately 51,315 gpd, based on Nassau County Department of Health sewage flow rates, plus irrigation (noted below). The Proposed Project is expected to create a demand for approximately 4,665 gpd of water for irrigation purposes, using a factor of ten percent of the expected 46,650± gpd of domestic water demand.

In addition to the calculated water demand for the Proposed Action, as indicated above, two potential alternative bedroom mixes were analyzed, to identify potential projected water demand. The proposed bedroom mix would generate slightly less total water demand (including irrigation) than the potential alternative two-bedroom scenario and slightly more than the potential alternative one-bedroom scenario.

To reduce water demand under the Proposed Action, rain sensors, low-flow fixtures, a rainwater cistern, and the planting of some vegetative species with low-water dependency would be installed on the Subject Property.

Discussions are ongoing with the PWWD regarding the analyses performed by the Applicant, the infrastructure required, and the measures needed to secure a letter of water availability. These discussions are expected to continue throughout the application process.

1.3.7.3 Fire Protection and EMS

The Port Washington Fire Department (FD) currently serves the Subject Property for fire protection and ambulance/EMS. The Port Washington FD consists of four separate companies each responsible for a different faucet of fire or EMS operations. These companies consist of the Atlantic Hook and Ladder Co #1, providing ladder and heavy rescue; Protection Engine Co #1 and Flower Hill Hose Co #1, both engine companies; and Fire Medic Co #1, providing emergency medical services. The fire department has indicated they are a part of the Nassau County Fire Service Mutual Aid Plan a part of the 8th Battalion. Standards published under the ULI Development Impact Assessment Handbook were used to analyze impacts of the Proposed Project on fire protection and EMS. Upon analysis, it was determined that virtually no additional fire personnel would be required to serve the Proposed Project, based on standards of 1.65 fire personnel per 1,000 population.

Correspondence was transmitted to the Port Washington FD with a response received providing information requested. In its correspondence, the Port Washington FD did not indicate the need to acquire new equipment or apparatus to serve the Proposed Action. No fuel storage is proposed for the marina. Additionally, the Proposed Project poses no other significant potential fire hazards. Furthermore, the Proposed Action is not anticipated to result in significant adverse impacts to fire protection services from the standpoint of building height, since the Fire Department maintains equipment that can reach the highest floors of the Proposed Building, as well as the roof.

The site plans will be sent to the Nassau County Fire Marshal for review and approval, and a meeting to discuss the plans will be scheduled. The Proposed Building would be constructed to the latest New York State Building and Fire Code and would be equipped with sprinklers and fire alarms. As such, the Proposed Project is not expected to have a significant adverse impact on fire protection or emergency medical services.

1.3.7.4 Police Protection

The Subject Property is and would continue to be served by the Port Washington Police Department (PWPD) after completion of the Proposed Project. Upon analysis, the introduction of 378 residents would generate the need for less than one additional police personnel and vehicle, respectively. As the ULI multipliers assume no existing services, actual demand is expected to be lower.

Police protection services to the Subject Property from the PWPD would be supplemented by on-site security protection measures, including the presence of a doorman and superintendent, security cameras installed throughout the proposed development, security gates on entrances to the two-level parking garage, and exterior lighting. Correspondence was sent to the PWPD with follow-up correspondence sent a few months later. To date, no response has been received.

Overall, no significant adverse impact to police protection capacity is expected to result from the implementation of the Proposed Project.

1.3.7.5 Port Washington Union Free School District

The Subject Property is located within the Port Washington Union Free School District (UFSD), which contains seven schools. The school district provides busing to and from public and private/parochial schools within the district for students living in a certain radius from the elementary, middle, and high schools. Since the Subject Property is industrial, it does not generate any school-aged children as there is no permanent population. To determine the potential impact of the proposed 176 multi-family residential development, The Real Estate Institute at Stony Brook University (REI) 2019 report was analyzed. Based on the estimated public school-aged children (PSAC) multiplier median of 0.08 students per 100 units, it is estimated that the Proposed Project is to produce approximately 14 PSAC. An analysis was also conducted for the potential alternative one-bedroom scenario including 182 units and the total of the potential alternative two-bedroom scenario including 171 units, the total PSAC under those scenarios would be 15 and 14, respectively. Therefore, under the potential alternative scenarios for bedroom mix, the total PSAC does not differ significantly from the proposed bedroom mix. The introduction of 14 PSAC to the Port Washington UFSD would reflect a 0.25 percent increase in enrollment, based on the 2020-2021 total enrollment of 5,472 students. This degree of magnitude is well within the range of typical annual enrollment fluctuations that the Port Washington UFSD experiences.

Based on the foregoing, there will be no significant adverse impact on educational facilities within the Port Washington UFSD.

1.3.7.6 Solid Waste Disposal

The Subject Property is currently serviced by a private carter for solid waste pick up and disposal. As the Subject Property is currently an active sand and gravel storage facility, the Subject Property produces a minimal amount of solid waste. The estimated quantity of solid waste that would be generated by the Proposed Project would be approximately 1,345 pounds of solid waste per day (20.5± tons per month). Based on United States Environmental Protection Agency (EPA)'s ratio of the countries of recycled goods to total solid waste collected, it is estimated that the Proposed Project would generate approximately 4.92 tons/month of recyclable materials out of the total 20.5± tons/month of solid waste produced. Recycling disposal cans would be located throughout the development to promote recycling and reduce the volume of refuse to be disposed at a landfill or incinerator.

1.3.7.7 Private Utilities

The Subject Property is currented served by PSEG Long Island for electricity and National Grid for natural gas. PSEG Long Island will continue to provide service to the proposed residential development via connections through existing overhead distribution lines and National Grid will provide natural gas to the proposed development.

Under the Proposed Action, it has been estimated that the demand for electricity at full occupancy would be 2,200,000 kilowatt-hours (kWh) annually, and electrical loads are estimated to be 3,600 kilowatts (kW) connected, annually. Moreover, at full occupancy in terms of natural gas usage, the Proposed Action is estimated to use approximately 80,000 therms annually. Additionally, the Proposed Action includes the installation of a 40kW solar array to power common areas and parking areas, offsetting some of the electricity coming from the grid.

Consultations are ongoing with both service providers to discuss service availability and demand.

Overall, electricity and natural gas are expected to be available to the Proposed Project, and no significant adverse impacts to these utilities are anticipated. However, consultations will continue with these utilities throughout the application process.

Mitigation

Implementation of the Proposed Action is not expected to result in significant adverse impacts to community facilities and utilities. Accordingly, no mitigation measures are proposed. However, to minimize potential adverse impacts to community facilities and utilities, the following will occur:

- Increased demand on community services due to the Proposed Action would be partially offset by additional property tax revenues generated by the new improvements.
- The Proposed Building would be constructed to the latest New York State Building and Fire Code.
- > The Proposed Building would be sprinklered, and fire alarms would be installed.
- Rain sensors, low-flow fixtures, a rainwater cistern, and the planting of some vegetative species with low-water dependency would be installed on the Subject Property to reduce water demand.
- > The Proposed Project would include a sewer main and pump station to accommodate the residential building.
- The Applicant would provide access to the residents' lounge during shift changes for the PWPD as well as a dedicated boat slip for Town emergency service provider use.
- > The Proposed Project would include the installation of a 40 kW per day solar array to power common areas and parking areas to offset electricity coming from the grid.

1.3.8 Noise

The existing Subject Property includes various sources of noise, including vehicular traffic traveling on West Shore Road, and noise associated with the existing pier and storage facility. To evaluate the Proposed Project's noise impact, a noise analysis was conducted to address the potential for noise increases. The analysis conducted noise monitoring at five locations in the study area as defined in the Final Scope. Data collected were then evaluated based on NYSDEC noise impact criteria as such, a potential significant adverse noise impact would occur if the Proposed Action would increase noise levels by 6 dB or more at the receptor locations. Potential significant adverse noise impact at existing receptors is assessed

Noise Level Increase (dB)	Impact Determination	Need for Mitigation
0 to 3	No impact	None
3 to 6	Potential adverse impact for the most sensitive receptors	Mitigation may be needed for the most sensitive receptors.
6 to 10	Potential adverse impact depending on existing noise level and character of land use	Mitigation is generally needed for most residential receptors.
10 or more	Adverse impact	Mitigation is warranted where reasonable.

by comparing existing and future noise levels per the NYSDEC policy. NYSDEC guidelines for assessing noise impacts and mitigation can be seen below:

The Proposed Action is expected to introduce new sources of noise that may affect existing receptors in the study area. Potential significant adverse noise impacts at existing receptors were assessed by comparing existing and future noise levels per the NYSDEC policy. The predominant source of ambient sound identified in the study was from traffic on local roadways for all measurement locations and did not exceed the NYSDEC criteria. Future potential sources of noise were also predicted for the Subject Property. During construction, there may be a temporary increase in noise levels of approximately 8.8 dBa at North Hempstead Beach Park, which was one of the five noise study locations. However, construction would be performed in accordance with Chapter 38 of the Town of North Hempstead Code and such noise levels during certain construction activities would be of temporary duration.

The noise analysis examined both mobile and stationary sources of noise (including heating, ventilation, and air conditioning [HVAC] systems). Based on the TIS, the Proposed Action will not result in a substantial increase in traffic or mobile source noise. Therefore, it would not result in significant adverse noise impacts associated with mobile sources. Additionally, the Proposed Project is expected to result in a reduction of noise levels at the Subject Property as compared to existing conditions. Thus, there would be no significant adverse noise impact from stationary sources. Overall, the noise levels at sensitive receptors identified near the Proposed Project would not exceed the NYSDEC criteria and would operate in accordance with Chapter 38 of the Town Code. As such, no significant adverse impact relating to noise is expected to result from the Proposed Project.

Mitigation

Based on the analysis, noise levels at sensitive receptors identified near the Subject Property would not exceed the NYSDEC criteria and would operate in accordance with Chapter 38 of the Town Code. Therefore, no noise mitigation would be warranted. However, implementation of BMPs to reduce noise from construction is recommended. BMPs for reducing construction noise may include one or more of the following:

- > Replacing back-up alarms with strobes, as allowed within OSHA regulations.
- Assuring that equipment is functioning properly and is equipped with mufflers and other noise-reducing features.
- > Locating especially noisy equipment as far from sensitive receptors as possible.

- > Using quieter construction equipment and methods, as feasible, such as smaller backhoes and excavators which would operate near the northern property line.
- > Maintaining equipment to avoid louder operation associated with mechanical issues.
- Using path noise control measures such as portable enclosures for small equipment (i.e., jackhammers and saws).
- > Erecting portable noise walls around construction areas to reduce noise.
- Limiting the periods of time when construction may occur is a common approach to minimizing impact. Adhering to time-of-day restrictions in the Town of North Hempstead would minimize impact to existing residences.
- Maintaining strong communication and public outreach with adjacent neighbors is a critical step in minimizing impact. Providing abutters information about the time and nature of construction activities can often minimize the effects of construction noise.

1.3.9 Air Quality

The analysis of air quality includes an assessment of NYSDEC air quality monitoring systems that measure and record concentrations of various air pollutants within the State. During operations, the proposed residential building will use natural gas for its HVAC and hot water systems. Pollutants of concern from natural gas combustion are particulate matter, mostly PM_{2.5}, and nitrogen dioxide, NO₂. Existing concentrations of these pollutants in the project area (at the monitoring stations closest to the Subject Property) are about half of the respective standard level. This leaves a big window for any impact to reach the level of standard that achieves concentrations that could potentially affect public health and makes such a significant adverse impact from the Proposed Project highly unlikely. In addition to the HVAC related emissions, the other source of on-site emissions is related to idling and moving vehicles in the parking garage and at the parking lot. Emissions from the outside parking lot would not be significant because the lot's 58 proposed spaces designate it as a small lot. Emissions from parking inside the Proposed Building will be naturally ventilated through louvers on the side of the building. These emissions will also be relatively low and exhausted via a large area spread over the facade of the building which will further reduce the potential impact of these emissions. As such, no significant adverse air quality effects of parking emissions are expected during operations.

Construction impacts on air quality have the potential to be significant, but they are temporary in nature. Construction activities, including the use of large diesel-powered machinery, dust-generating operations such as earth-moving, loading and unloading, travelling on unpaved surfaces, extended idling of concrete trucks, etc. could generate high emissions at the construction site. The determination of whether to conduct a qualitative or quantitative construction emissions analysis should take into account factors including, but not limited to: duration of construction activities, location of the site in relation to existing residential uses or other sensitive receptors, the intensity of the construction activity, and the extent to which the project incorporates commitments to appropriate emission control measures. Construction of the seven-story, approximately 263,000 sf residential building and improvements to the Subject Property would occur over a 30±-month period of time. The USEPA considers a construction project lasting less than five years to be short term and to have no potential for significant adverse air quality impacts unless there are sensitive receptors right next to it. The North Hempstead Beach Park and other sensitive land uses are

within 100-200 feet from the Proposed Building location; this 100-200-foot buffer will allow for adequate dispersion of construction emissions in order not to have significant air quality impacts. With construction mitigation measures implemented, as noted below, it is unlikely that sensitive areas would experience significant adverse air quality impacts from construction.

Mitigation

Mitigation measures that have been integrated into the Proposed Project to reduce potential impacts with respect to air quality are described below. Implementation of these measures is expected to greatly reduce potential air quality impacts on surrounding sensitive land uses.

- > The installation and utilization of high-efficiency appliances (i.e., furnaces, water heaters, stoves/ovens) during project operations.
- > The installation of a 40 kW per day solar array to power common areas and parking areas to reduce the burning of fossil fuels.
- > The installation of highly reflective white Thermoplastic Polyolefin (TPO) roofing to minimize heat absorption and reduce cooling needs, which will reduce the air conditioning rate.
- > The installation of insulation between parking and residential areas to reduce heat loss and save on HVAC use.
- > The use of a shuttle to the train station that would reduce annual VMT from local trips, thus reducing the burning of fossil fuel from vehicles with internal combustion engines.

These operational measures would reduce the use of natural gas and other fossil fuels, and therefore minimize emissions from its combustion which would further decrease the air quality impacts. Mitigation measures noted below are also usually applied during construction to reduce nuisance dust and other pollutant emissions. Some of these measures are federally or State regulated.

- Dust Control. Stabilization of non-driving areas and sprinkling, covering, or/and installing barriers along driving areas during construction will be utilized in order to prevent dust from becoming airborne.
- > Clean Fuel. Ultra-low sulfur diesel (ULSD) would be used exclusively for diesel engines related to construction activities for the Proposed Project.
- Diesel Equipment Reduction. Hoists and small equipment, such as lifts, compressors, welders, and pumps are likely to use electric engines that operate on grid power instead of diesel power engines to the extent practical.
- Restrictions on Vehicle Idling. On-site vehicle idle time would be restricted for all equipment and vehicles that are not using their engines to operate a loading, unloading, or processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine.
- Given the construction timeframe, equipment meeting Tier 4 standards for diesel engines (model years 2011/12 and beyond) would be expected to be in wide use and comprise the majority of contractors' fleet. If contractors choose to use older diesel equipment, it is expected that the use of diesel particulate filters (DPF) in Tier 3 emission standard for diesel engines (model years 2006-2011 for engine sizes between 100 and

600 hp) will be prevalent. Tier 3 with DPF achieves the same particulate matter emission reductions as a newer Tier 4 emission standard for diesel engines. The combination of Tier 4 and Tier 3 engines with DPF would achieve diesel particulate matter reductions of approximately 90 percent when compared to older uncontrolled engines.

> In order to control construction-related traffic, construction daily hours may be adjusted to prevent coincidence with the peak traffic hours and avoid congestion.

1.3.10 Light Deprivation and Shadows

Sunlight-sensitive resources are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Generally, the following are considered to be sunlight-sensitive resources:

- > Public open space (e.g., parks, beaches, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating).
- > Features of historic architectural resources that depend on sunlight for their enjoyment by the public.
- > Natural resources, where the introduction of shadows could alter the resource's condition or microclimate.

In order to understand the potential light deprivation and/or shadow impact of the proposed multi-story, multi-family residential building on identified sunlight-sensitive resources, a shadow analysis was conducted. A model for rendering the shadows was created for the analysis, where the Subject Property is geographically located via latitude and longitude, with north rotated in the proper direction according to the location of the sun and proposed shadow.

The rendering program for the Shadow Study requires the location of the site (longitude and latitude), the dates of the year (month and day), and the times of day to be analyzed, as well as the dimensions of the proposed building. The height of the proposed building included in the Shadow Study was 69.75 feet. The program then generates the location of the sun and the shadows the proposed building is expected to cast on the dates and times provided. The program then analyzes several conditions -- March 20 at 9:00 a.m., 12:00 p.m., and 3:00 p.m., and June 21, September 21, and December 21 at the same times for the proposed conditions.

June 21 is the date of the summer solstice (the longest day of the year) in which the sun is directly overhead in the northern hemisphere and shadow lengths are shorter than any other day of the year. December 21 marks the winter solstice (the shortest day of the year) when the location of the sun is farthest south due to the earth's equatorial tilt with respect to the sun. Since the sun is so low on the horizon, shadows cast on December 21 are longer than on any other day of the year.

It was identified, to a large degree, that project-generated shadows would remain on-site with short durations of shadows cast onto adjacent properties. However, the most significant shadows would occur in December when fewer people would be outside for an extended period of time and when outdoor activities would be minimal.

As set forth in the Final Scope, the following resources were identified as sunlight-sensitive: Beacon Hill Bungalow Colony; North Hempstead Beach Park; and Tappen Beach (on the east side of Hempstead Harbor). The results of the foregoing Shadow Study show that the Proposed Action is not expected to cast shadows on any of these resources. The Shadow Study indicates that Hempstead Harbor would receive incremental shadows (i.e., shadows that do not occur under existing conditions but would occur as a result of the Proposed Action) during portions of all three analysis periods. However, based on analysis conducted, no significant adverse impacts to Hempstead Harbor are anticipated due to incremental shadows from the Proposed Action, and no further analysis is necessary.

Mitigation

No significant adverse light deprivation or shadows impacts have been identified, based on the foregoing analyses. Therefore, no mitigation measures are proposed.

1.3.11 Coastal Resiliency

Under the Proposed Action, many of the existing structures found along the Subject Property's coastline and within the adjoining waters would be removed, including a portion of the existing concrete platform, the deteriorated bulkhead, the remnants of the former dry dock (i.e., steel cribbing), the remnants of the northern wooden pier, the sunken and intact barges, and other debris found throughout the Subject Property's underwater lands. The Proposed Action includes the installation of a new bulkhead along the Subject Property's modified coastline; a timber pier near the former concrete boat ramp; four floating docks; and a 72-linear-foot wave screen. Additionally, a significantly smaller earth-filled pier would be rehabilitated, with the proposed new bulkhead running along all three sides of the proposed pier.

The Proposed Action involves the removal of, and in some instances the replacement or rehabilitation of, existing hard structures. As such, the Proposed Action would not result in a significant increase in the area of development along the Subject Property's coastline. Rather, the Proposed Action would result in a net increase of exposed tidal areas. Specifically, the Proposed Action would fill a total of 7,665± SF of tidal areas, while 14,596± SF of currently covered tidal areas would be exposed. As a result, the Proposed Action would expose a net total of 6,931± SF of tidal areas. Following the implementation of the Proposed Action, coastal activities at the Subject Property would primarily consist of active (i.e., boating) and passive recreation (e.g., sightseeing, photography, etc.). As noted above, the proposed earth-filled pier would also accommodate educational and public, family-friendly events.

Additionally, the Proposed Building would be designed to conform to Chapter 21 of the Town Code, which addresses floodplain management and regulations. The proposed site design is in accordance with Chapter 21 by elevating the lowest elevated floor at least 18 feet above mean sea level (amsl). Further, the lowest finished floor would be raised to 19 feet amsl, thereby providing a clearance of three feet above the respective BFE, which to the extent feasible, minimizes the potential for impacts associated with sea level rise.

The Proposed Action was also examined as to New York State's coastal policies that promote the beneficial use of coastal resources, prevent their impairment, or otherwise address activities that may affect resources within the New York State Coastal Zone. The detailed policy analysis performed for the Proposed Project indicates that the residential building and public marina, pier, and promenade, as water-enhanced and water-dependent uses, would be generally consisted with New York State's coastal policies.

Overall, the Proposed Action would not inhibit the future implementation of those mitigation actions in the Town's Annex of the *Nassau County Hazard Mitigation Plan* that are proposed within the vicinity of the Subject Property. Rather, the Proposed Action would help achieve the goals of same by contributing to the installation of modern drainage infrastructure and by decreasing the amount of impervious surface on the Subject Property.

Mitigation

Though no significant adverse impacts related to coastal resiliency have been identified, various measures have been incorporated into the overall project design to ensure compliance with the prevailing regulations and relevant management plans and to improve coastal resiliency, including the following:

- A SWPPP would be developed and implemented prior to construction; the SWPPP would be designed to be protective of coastal waters.
- > The Proposed Action would result in a net increase of exposed tidal areas.
- > Wave screens would be utilized to dampen the energy and impact of incoming waves in a manner that, as compared to traditional breakwater structures, is less physically intrusive.
- The proposed marina and public pier and promenade would be designed to preclude adverse impacts from flooding. The proposed marina would utilize floating docks, which would rise and fall with the water elevation; other portions of the proposed marina and public pier and promenade would be designed to be inundated during a flooding event.
- > The lowest finished floor of the Proposed Building would be elevated to provide three feet of separation above its respective BFE. Same would also be elevated well above the projected sea level for the year 2100.

1.3.12 Greenhouse Gas Emissions

Greenhouse gases (GHGs) are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds. Increased concentrations of GHGs change the global climate, resulting in wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. The Proposed Action would generate both direct, indirect, and mobile operational GHG emissions. The direct GHG emissions would include emissions from the Proposed Building's HVAC systems and shuttle service to the LIRR train station. The indirect GHG emissions would include power generated by the Proposed Action (e.g., vehicle trips by residents and outside deliveries, as well as the proposed shuttle) were also assessed as mobile source emissions. The Proposed Action is not expected to fundamentally impact the waste management system and, therefore, emissions from solid waste were not considered. The Proposed Action's resulting operational GHG emissions would comprise a small fraction of the total GHG emissions of New York State, Long Island, and the Town of North Hempstead. Specifically, the Proposed Action would be expected to contribute less than 0.002 percent of total New York State GHG emissions, approximately 0.01 percent of total Long Island GHG emissions, and around 0.09 percent of total Town of North Hempstead GHG emissions. Overall, the Proposed Action would not significantly contribute to GHG emissions in the local area or region.

Construction of the Proposed Project would follow New York State regulations and codes for construction, which incorporate carbon reduction measures. These include reduction of diesel emissions, limitation of idle time for vehicles and equipment and other measures that reduce carbon emissions during construction. Other mitigation measures for operation and construction of the Proposed Action are described below.

Mitigation

In accordance with recommendations included in the *SEQRA Handbook*, the Proposed Action would incorporate various measures designed to conserve energy which, in turn, would reduce GHG emissions associated with the Proposed Project. These measures include the following:

- > The Proposed Project would operate a shuttle to the Port Washington train station that would reduce annual vehicle miles traveled (VMT) from local trips.
- > The installation of insulation barriers between parking areas and residential/amenity spaces to minimize heat loss/gain.
- > The installation and utilization of high-efficiency appliances (i.e., furnaces, water heaters, stoves/ovens).
- > The installation and utilization of high-efficiency direct expansion air condition (DX A/C) units to heat and cool residential units and common spaces.
- > The installation of a 40 kW per day solar array to power common areas and parking areas.
- > The installation of highly reflective white Thermoplastic Polyolefin (TPO) roofing to minimize heat absorption and reduce cooling needs.

The Proposed Action would also provide accommodations for shared/non-motorized modes of transportation, which would reduce the dependence on private automobiles and the resulting GHG emissions of same. Such accommodations would include:

- > The proposed shuttle to/from the nearby train station.
- > Bicycle storage facilities.
- > Improved pedestrian connections.

Further, the Proposed Action would incorporate other design measures that, as suggested within the *NYSDEC EIS GHG Guide*, would reduce GHG emissions from operations of the Proposed Project. Such measures would specifically include:

- > The use of water-efficient landscaping.
- > A marketing/information program that provides residents with ride sharing transit (i.e., the proposed shuttle) information.

> The promotion and facilitation of recycling.

1.3.13 Use and Conservation of Energy

Electricity is currently provided to the Subject Property by PSEG Long Island. According to the Phase I ESA conducted by VHB in June 2020, electricity is used for the Subject Property's current heating needs; natural gas is not currently utilized at the Subject Property. Construction of the Proposed Building, as well as the other project components (i.e., the proposed marina), would require the use of various power tools and mechanical equipment that utilize energy, including a pile driver, four 80-foot boom lifts, two tower cranes, two front end loaders, a track hoe, a bulldozer, and multiple road trucks for deliveries and moving material.

The Proposed Building would utilize a combination of electricity and natural gas during operations to meet its energy demands. Consultations were undertaken with the respective service providers to confirm service availability for the Proposed Building. In addition, the Proposed Action would provide accommodations for shared/non-motorized modes of transportation, which would reduce the dependence on private automobiles and the resulting energy consumption. Such accommodations would include:

- > A proposed shuttle to and from the nearby train station
- > Bicycle storage facilities
- > Improved pedestrian connections to nearby community destinations

Overall, in consideration of the proposed energy conservation measures, operation of the Proposed Action would not result in significant adverse energy impacts.

Mitigation

The construction and operation of the Proposed Building, and the other project components, would not result in significant adverse energy impacts. As described above, the Proposed Action has incorporated various measures to reduce energy consumption and minimize the potential for significant adverse impacts.

1.3.14 Aesthetics and Cultural Resources

1.3.14.1 Aesthetic Resources

The aesthetics of the Subject Property would be altered considerably upon implementation of the Proposed Project. The existing industrial waterfront property containing piles of construction material, a small number of one-story storage buildings, and dilapidated waterfront structures including a concrete platform, wood pilings, and the steel dry dock, would be replaced with a seven-story residential multi-family building and associated site improvements including surface parking, a waterfront pier and promenade and marina, and landscaping. The parking levels would be partially below-grade such that only a portion of the parking would be visible at street level. The building massing would be oriented northsouth, parallel to and set back from both the waterfront and West Shore Road to allow for an attractive, landscaped front entrance to the building and for the public waterfront amenities. Additionally, several multi-family residential buildings exist within one mile of the Subject Property that are of similar height and character to the Proposed Action.

The Subject Property is visible from North Hempstead Beach Park and Harry Tappen Beach Park (Oyster Bay), which are two municipally owned beaches. The Proposed Action would result in a change in visual conditions from North Hempstead Beach Park and Harry Tappen Beach Park. However, from the locations of the most highly utilized park facilities, generally located to the south of the parking lot, these views would include a building in the distance that would not result in a significant adverse impact to existing aesthetic conditions in the park. The Proposed Project would not block views to significant nearby visual resources such as Hempstead Harbor, though the views of Hempstead Harbor would be altered due to the implementation of the Proposed Action. In addition, from locations closer to the Subject Property, it is the Applicant's opinion that visual conditions would improve on the Subject Property with the removal of the dilapidated site structures to be replaced with a new, modern multi-family building with improved landscaping and increased public access to the waterfront, thereby enhancing the views from the Beach Park.

The Proposed Project has been designed so that it would be visually cohesive and appealing, enhanced by site lighting, landscaping, attractive architectural features, and other amenities specifically selected to create an open and inviting waterfront residential community that enhances the public's access and enjoyment of Hempstead Harbor. The Proposed Project would be a significant improvement to site aesthetics when compared with the dilapidated industrial character and structures that currently exist on the Subject Property. The Proposed Action would support transformation of the site from an underutilized industrial property to one that can be enjoyed by residents and visitors, as well as users of Hempstead Harbor and the North Hempstead Beach Park.

Accordingly, based on the foregoing analysis, the Proposed Action would not result in significant adverse aesthetic impacts to the Subject Property or the surrounding area.

1.3.14.2 Historic and Cultural Resources

No historic or archaeological resources have been identified within, or in the immediate vicinity of, the Subject Property. Furthermore, correspondence from the New York State Office of Parks, Recreation and Historic Preservation, dated September 10, 2021, indicates that "no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project." As such, the Proposed Action would not result in a significant adverse impact to historic and cultural resources.

In addition, no arts or cultural venues were identified on the Subject Property in the *North Hempstead Cultural Master Plan.* However, North Hempstead Beach Park was identified as a Town cultural asset as an open space that can accommodate festivals and other cultural events. In regard to North Hempstead Beach Park, the Proposed Project would provide a public promenade and pier that would serve as a northward extension of the Hempstead Harbor Trail along the shoreline of North Hempstead Beach Park, which would be designed to pay homage to some of the site's history, speak to local marine and bird life, and provide space for public, family-friendly events. The Proposed Project would also provide additional surface parking to accommodate visitors to North Hempstead Beach Park. As such, the Proposed Project is consistent with the goals of the *North Hempstead Cultural Master Plan* by improving and complementing this existing Town cultural asset.

Mitigation

The Proposed Action would not result in significant adverse impacts to the aesthetic character of the site, or within the primary or secondary Study Areas. Several features have been incorporated into the project design to improve aesthetic conditions and minimize visual effects of the proposed new development on surrounding properties, including an extensive landscaping plan and attractive architectural features. Based on the analysis, aesthetic mitigation is not warranted beyond these measures.

In addition, as discussed above, no historic or archaeological resources have been identified within, or in the immediate vicinity of the Subject Property, and no significant adverse impacts to historic and cultural resources would occur. Therefore, no mitigation measures pertaining to cultural resources are proposed.

1.3.15 Fiscal and Economic Impacts

The Proposed Project would introduce 176 new residential units to the Subject Property with a mix of 80 one-bedroom units, 82 two-bedroom units, and 14 three-bedroom units, including 17 affordable/workforce units. The Proposed Project would generate a residential population of approximately 378, thereby increasing the current Port Washington population (15,808) by 2.4 percent to 16,186.

1.3.15.1 Potential Taxes

The Applicant is seeking a 20-year Payment in Lieu of Taxes (PILOT) agreement from the Nassau County Industrial Development Agency (IDA). If the Proposed Project does not receive a PILOT agreement, the Subject Property would be reassessed during and after construction and would be subject to standard property taxes. Through the analysis performed by Koeppel Martone & Leistman, L.L.C., it was estimated that the Subject Property would generate total Town, County, and Port Washington UFSD taxes of \$602,788 in 2023, when the structure is 25 percent complete; \$1,717,945 in 2024 when the structure is 75 percent complete; and \$2,176,055 in 2025 when the structure is 100 percent complete. The Subject Property would also generate taxes for the applicable special taxing districts, including the Town of North Hempstead Lighting District, Port Washington Fire Protection District, Port Washington Public Parking District, Port Washington Water District, Port Washington Water District, Port Washington Water District, Port Washington Water Pollution Control District.

1.3.15.2 Estimated Municipal Costs

Using a per capita approach, it is estimated that the Proposed Project municipal costs would be approximately \$42,710 to the Town General Fund, \$181,649 to the Town Outside Village Fund, \$229,965 to Nassau County, and \$128,608 to the Port Washington UFSD, for a combined total of \$582,931.

With a PILOT agreement, at full build-out in 2025, the Proposed Project would generate an estimated \$2,649,275 combined to the Town, County, Port Washington UFSD, and applicable

special tax districts. Without a PILOT agreement, at full build-out in 2025, the Proposed Project would generate an estimated \$2,176,055 in combined property taxes to the Town, County, and Port Washington UFSD.

1.3.15.3 Job Creation

In addition to the economic benefits realized from local property taxes or a PILOT agreement, there would be additional direct and indirect economic benefits associated with the Proposed Action. An analysis was run using the IMPLAN software to determine the economic impact of the Proposed Action on the local economy. Construction spending would provide a significant benefit to the local economy and spur secondary economic benefits. As worker wages and payments to suppliers are spent and recirculated in the area economy, additional jobs, income and revenue would be created in a variety of industries, such as eating and drinking establishments, retail stores, wholesalers, and service providers. In the short-term, it is estimated that an annual average of 567 jobs would be supported by project construction over a two-year period. Overall labor income would be approximately \$37.3 million annually and economic output would be approximately \$96.5 million annually over the two-year construction period.

The Proposed Action would also create permanent employment. The 176 residential units would create approximately 7 direct jobs. These direct jobs would further support an additional two induced and indirect jobs. Total labor income would be \$311,582 annually and economic output would be approximately \$611,725 annually.

1.3.15.4 Direct Residential and Business Displacement

The Subject Property currently does not contain any residences or residents. Therefore, direct residential displacement will not occur.

Moreover, the Subject Property is currently occupied by Bay Aggregates Corporation, a wholesale and supply and landscape company. The company currently has three employees on the site. The direct displacement of one business and three employees is minor and not expected to significantly impact socioeconomic conditions in Port Washington or the Town of North Hempstead.

1.3.15.5 Indirect Residential and Business Displacement

Indirect residential displacement has the potential to occur when a project introduces or accelerates a trend of raising area residential rents to the extent that vulnerable populations could be displaced. Using data from the American Community Survey 5-Year Estimates for 2015-2019, it is anticipated that the average annual household income would be \$215,241, which is similar to the current average household income for Port Washington of \$213,564. Because the average household income of the new tenants would likely be similar to the existing average household income of Port Washington, significant indirect residential displacement is not anticipated to occur as a result of the Proposed Project.

Indirect business displacement may occur when a project directly displaces a type of use that directly supports businesses in the area, brings a substantial customer base to the area, or displaces residents or workers who form the customer base of local businesses. As previously discussed, the Proposed Project would result in the displacement of one business with three

on-site employees, and no residents. Therefore, indirect business displacement as a result of direct displacement is not expected to occur.

Indirect business displacement may also occur when a project results in substantial new development that is markedly different from existing uses in the area, which could introduce a trend of increased commercial rent. The Proposed Project would introduce a new use to the site, however, multi-family uses are found within one mile of the Subject Property, within the same neighborhood, so the Proposed Project would not be markedly different from existing uses in the area.

1.3.15.6 Adverse Effects from Specific Industries

It may be possible for a given project to affect the operation and viability of a specific industry not necessarily tied to a specific location. The Proposed Project would not be expected to affect conditions within a specific industry, affect a substantial number of workers or residents who depend on the goods or services provided by the displaced business, or result in the loss or substantial diminishment of a particularly important product or service in the area. The water-based commerce industry would not be impacted because the current use on the Subject Property is not water-based. Therefore, adverse effects on specific industries are not anticipated.

Mitigation

It is anticipated that the Proposed Action would generate revenue for the Town, County, Port Washington UFSD, and other special tax districts through a PILOT or property tax in excess of the municipal costs associated with the Proposed Project. It is also estimated that the Proposed Project would support an annual average of 567 jobs through project construction over a two-year period, and 9 permanent jobs at project completion. Significant adverse impacts to fiscal and economic conditions are not anticipated, therefore, no mitigation is proposed.

1.4 Unavoidable Adverse Effects

The environmental impacts associated with the Proposed Project and the proposed mitigation measures to minimize such impacts have been described above. Those impacts that cannot be either entirely avoided or fully mitigated are described below.

1.4.1 Short-Term Impacts

Based upon the analyses provided in this DEIS, there would be several temporary construction-related impacts associated with the implementation of the Proposed Action that cannot be completely mitigated or avoided. These impacts are associated with the typical site preparation and development activities (i.e., grading, excavation for foundations, installation of utilities, and the construction of the Proposed Building and the marina) under the Proposed Action. These impacts would be temporary in nature and would cease upon completion of the construction phase of the Proposed Project, which is anticipated to be 30 months. These impacts include:

- > **Soils and Topography:** Soils would be disturbed by grading, excavation, and mounding activities during site work.
- > **Soils and Topography:** Despite the use of extensive and strategically-placed erosion and sediment control measures, minor occurrences of erosion and sediment transport, as well as fugitive dust, may occur.
- > **Air Quality:** There is the potential for minor releases of air contaminants that would occur from construction equipment and emissions of fugitive dust during dry periods, although dust would be almost entirely controlled by covering soil piles and watering down the site.
- > **Transportation:** Operation of construction equipment, trucks, and worker vehicles may temporarily impact traffic in the area of the Subject Property.
- > **Aesthetics:** The visual quality of the area may be temporarily impacted by the presence and operation of construction equipment on the Subject Property.
- Noise: Construction activities may result in increases in noise levels at the Subject Property boundaries. However, construction would only occur during hours permitted by the Town of North Hempstead.
- Ecological Resources: Dredging, filling, and other construction activities within the adjoining waters would include benthic and water column disturbance. Potential disturbance to tidal habitats located farther afield within Hempstead Harbor may also occur, due to water column turbidity, benthic siltation, and noise/vibration impacts from pile installation and other construction activities. The proposed waterfront improvements and work activities would be subject to the conditions, regulations, and prohibitions of the NYSDEC and USACE, which are expected to include seasonal, time of day, and other restrictions on when the work may be conducted.

1.4.2 Long-Term Impacts

Several long-term impacts associated with implementation of the Proposed Action have been identified, though mitigation measures have been proposed to reduce or eliminate these impacts, to the degree practicable. The long-term impacts listed below are unavoidable, but are not necessarily significant:

- > The Proposed Action would result in the removal of an active industrial use on the Subject Property.
- > The Proposed Action would result in the long-term commitment of the Subject Property as a multi-family residential use with a marina and public pier and promenade.
- > The Proposed Action would involve remediation of subsurface contamination at terrestrial portions of the Subject Property under the Brownfield or similar cleanup program. Same would provide a long-term improvement in subsurface conditions, while eliminating a potential source of harmful contamination to the wetlands and surface water habitats of the adjoining Hempstead Harbor.
- > Existing vegetation would be removed. However, the Proposed Action would include an extensive landscaping plan that would result in a net increase in landscaping and vegetation on-site.

- > The existing structures found within and adjacent to the Subject Property's waters would be removed. New, modern features would be installed, including a marina and a public pier and promenade.
- > Navigational hazards in Hempstead Harbor would be removed.
- > In association with the removal of the existing coastal features, the Proposed Action would result in a net increase in tidal wetland areas.
- > The Proposed Action would result in an increase in potable water demand. Additional sanitary wastewater would also be generated, approximately equal to the quantity of water consumption, minus irrigation. These service demands would be addressed by connecting the Proposed Building to the Port Washington Water Pollution Control District and Port Washington Water District infrastructure.
- > The Proposed Action would add a permanent population, including school-aged children, to the community. However, the local school district would be expected to see a net increase in revenue due to site-generated taxes, which would offset the cost to provide educational services to children generated by the Proposed Action.
- > Traffic would be added to the surrounding roadways due to the implementation of the Proposed Action. However, measures would be incorporated into the Proposed Action to mitigate impacts due to project-generated traffic, to the greatest degree practicable.
- > The visual character of the Subject Property and surrounding environment would be altered via the introduction of the Proposed Building, which would contain two parking levels with five residential levels above. The Proposed Building would incorporate a modern and aesthetically pleasing design that utilizes high-end materials and finishes.
- > Operation of the proposed residential use, as well as the proposed marina and public pier and promenade, would generate noise. However, noise levels would be consistent with the surrounding ambient noise conditions.

1.5 Irretrievable and Irreversible Commitment of Resources

The existing on-site improvements would be demolished and removed from the site to accommodate the Proposed Building and other associated project amenities (i.e., the proposed marina and public promenade and pier). Therefore, implementation of the Proposed Action would commit the Subject Property (including land and underwater land) to a multi-family residential use, with marina and other waterfront uses, and would preclude other development from occurring on the Subject Property.

Certain additional resources related to the construction aspects of the development would be committed. The construction phase of the Proposed Project would require the commitment of labor and fiscal resources, as well as time that would not be available for other projects. However, this need for construction workers and fiscal resources can be viewed as a beneficial impact to the construction industry, as approximately 567 jobs (i.e., 300 direct, 125 indirect, and 142 induced) are expected to be created during construction. Upon completion of construction, other labor commitments, such as the services of emergency services, educational, and public works personnel, are not expected to substantially increase as a result of the Proposed Action. In addition, during the operation phase of the Proposed Building, electricity, natural gas, water resources, and fossil fuels would be used for heating, cooling, and other purposes.

No significant or irretrievable commitment of resources is anticipated as a result of the Proposed Action. In particular, it is noted that the Proposed Action would not result in the irretrievable or irreversible loss of local or regional plant species, ecological communities, or wildlife populations, as the Subject Property is comprised of a largely unvegetated development that provides poor functional value, supports limited wildlife, and is composed of habitats that are designated by the NYNHP as unranked cultural communities. Rather, the Proposed Action would result in a significant increase in vegetated areas and a nearly oneacre reduction in impervious surface coverage; the Proposed Action would, therefore, result in guantitative and gualitative improvements in vegetated habitat, the removal of existing invasive plant species, and increased wildlife population density and diversity. Further, the Proposed Action would result in a net increase of 6,931± SF of tidal wetland areas, as well as the removal of existing dilapidated structures and debris within the wetlands; these improvements would improve wetland conditions. The Proposed Action would also reduce, to the greatest extent practicable, stormwater runoff into the adjoining Hempstead Harbor, which currently occurs under the existing condition. Therefore, implementation of the Proposed Action would result in quantitative and qualitative improvements to wetland ecological resources as well, and would not result in the irretrievable or irreversible commitment of same.

The commitment of natural and human resources associated with implementation of the Proposed Action would be offset and balanced by the substantial local and regional economic benefits, including net positive annual fiscal revenues and permanent jobs.

Based on the foregoing, no significant irretrievable or irreversible commitment of resources is anticipated as a result of the Proposed Action.

1.6 Growth Inducing Aspects

Growth-inducing aspects are generally described as the long-term, secondary effects of the Proposed Action. As such, the DEIS analyzed growth inducement with respect to *The SEQR Handbook*.

The Proposed Project is expected to add approximately 378 people to the hamlet of Port Washington, which has a current population of 15,808 based on the 2019 American Community Survey 5-Year Estimates. This represents an approximate 2.4 percent increase in the population of the hamlet. The projected population is likely to generate some new demand for local retail and service businesses that does not exist with the current industrial use. However, since the Proposed Project is located in a well-developed portion of the Town (between the Port Washington and Roslyn central business districts), it is not likely that the redevelopment of the Subject Property with 176 units, a marina, and pier would induce a substantial amount of new commercial growth within the downtowns.

There is a well-established infrastructure (e.g., roadways, gas, and electric utilities), existing educational and recreational resources and entertainment opportunities, etc., which are available to serve the projected population within the mature, established communities in the vicinity of the Subject Property. Furthermore, the Proposed Action seeks to improve existing water and sewer infrastructure on the Subject Property. Therefore, the Proposed Project is not expected to induce growth with respect to these facilities.

The proposed development of the Subject Property is in conformance with the *North Hempstead Beach Master Plan* to strengthen and reactivate the east side of the Port Washington Peninsula. Additionally, the redevelopment of the Subject Property, an existing industrial Brownfield site, would invigorate the Subject Property with an updated, modern development introducing a new population to this area.

With respect to the potential for multiple residences along West Shore Road due to the Proposed Project, the extant application involves a change of zone to allow multi-family development on the Subject Property. Based on a review of the Town Zoning Map, there are no other parcels located along West Shore Road in the vicinity of the Subject Property that are zoned for multi-family development. Therefore, a change of zone would be required for any application request for such development. Each individual application for a change of zone would require its own environmental review and each would be reviewed and evaluated on its own merits. Thus, the granting of one individual request for change of zone would not have a growth-inducing impact on the area with regard to additional residential development.

1.7 Alternatives

Pursuant to 6 NYCRR §617 and the Final Scope, this DEIS contains descriptions and evaluations of reasonable alternatives to the Proposed Action that are feasible for the Applicant to pursue, including:

- > Alternative 1: No Action Alternative
- Alternative 2: Development of the Subject Property under the existing Residence-AAA zoning regulations
- Alternative 3: Rezone to Multiple Residence and develop the Subject Property using only the 2.7-acre upland portion and assuming no access is granted to Lot 1035
- > Alternative 4: Rezone to Waterfront Business and develop the Subject Property with marine-dependent commercial uses
- Alternative 5: Rezone to Planned Waterfront Residential Community (PWRC) and develop the Subject Property with multiple-family dwellings

A summary of the quantifiable environmental impacts of each alternative is presented in table format below.

Parameter	Proposed Action	Alternative 1: No Action	Alternative 2: Development under Residence-AAA Zoning	Alternative 3: Development under Multiple Residence using only upland portion of Subject Property	Alternative 4: Development under existing Waterfront Business Zoning	Alternative 5: Development under Planned Waterfront Residential Community Zoning
Type of Development	Multi-family residential/Marina	Existing construction/landscape supply storage	Subdivided single-family residential	Multi-family residential	Waterfront restaurant	Multi-family residential
Number of Residential Units	176	0	4	72	0	40
Maximum Number of Stories	7	1	2	4	1	2
Population (residents) ¹	378	0	15	155	0	87
School-Aged Children ²	14	0	4 ¹	6	0	4
Area of Additional Disturbance (acres)	2.69	0	2.69	2.69	2.69	2.69
Impervious Area (acres)	1.40	2.36	0.48	1.52	1.49	1.42
Domestic Water / Sewage (gallons/day) ⁴	46,650	Note ³	1,200	21,600	10,000	12,000
Solid Waste (tons/month) ⁵	18.00	Note ³	0.80	7.12	1.57	4.02
Traffic Generation (trips)						
AM Peak Hour	63		3	29	6	16
PM Peak Hour	77	Note ³	4	37	62	20
Saturday Peak Hour	77		4	30	85	16

¹ Based on Rutgers University, Center for Urban Policy Research, Residential Demographic Multipliers

² Based on an estimated multiplier of 0.08 public school aged children per multi-family unit (see Appendix L)

³ The Subject Property is not presently serviced by sanitary sewers. Portable bathrooms accommodate the employees on-site. As the current operations of the existing industrial use and the existing number of employees at the Subject Property are limited, existing water, sewer, solid waste, and traffic generation is negligible.

⁴ Assumes 200 gallons per day per one-bedroom unit, and an additional 100 gallons per day for each additional bedroom; 300 gallons per day per single-family home; and 30 gallons per day per restaurant seat.

⁵ Salvato, J. (2003). Solid Waste Management. In *Environmental Engineering* (5th ed.)

1.7.1 Alternative 1: No Action

The no action alternative would result in no change to existing conditions in the impact categories analyzed in this Environmental Impact Statement. Under the no action alternative, remediation activities recommended in the Phase I and Phase II Environmental Site Assessments would not occur, and identified subsurface environmental contamination would continue in its current state and would likely continue to affect the Subject Property and Hempstead Harbor.

None of the identified community benefits associated with the Proposed Action would be realized under the no action alternative, such as the transformation of a dilapidated industrial site into a productive residential use in accordance with the *Shared Vision Plan for the Port Washington Peninsula*, the proposed development of affordable housing units, installation of public amenities including the public promenade and pier to serve as the northward extension of the shoreline Hempstead Harbor Trail, improved water quality conditions for Hempstead Harbor, or increased parking for visitors to the North Hempstead Beach Park.

Additionally, the no action alternative would be inconsistent with the Applicant's right to pursue development/redevelopment of the Subject Property and does not meet the objectives of the Applicant. As such, the no action alternative is not a feasible alternative for the Applicant.

1.7.2 Alternative 2: Retain Existing Residence-AAA Zone

Development under this alternative would result in the subdivision of the Subject Property into four single-family residential lots and the development of single-family homes on those lots in accordance with the prevailing bulk and dimensional zoning regulations. Alternative 2 would require the demolition of the existing buildings and structures on the Subject Property, and disturbance to the entire site to ready the area for redevelopment, as the existing industrial use would be entirely replaced with the single-family residential development. Several factors that would make single-family homes extremely difficult to sell in the market, the most prominent of which is the Subject Property's location within the flood zone. As a result, each home would require significant investment, including an uninhabitable elevated first floor, as well as flood insurance. Furthermore, the Subject Property requires significant up-front investment to ready the property for single-family residential uses, including a substantial amount for environmental clean-up. Reviewing the sales prices of the single-family homes versus the break-even cost make this alternative economically infeasible for the Applicant to develop the Subject Property in accordance with prevailing zoning. In addition, while the Applicant's portfolio includes single-family development, these projects are limited to developments of 300 units or more. Therefore, Alternative 2 is not considered a reasonable alternative and would not be pursued by the Applicant.

1.7.3 Alternative 3: Rezone to Multiple Residence with Reduced Yield

Alternative 3 contemplates the potential redevelopment of the Subject Property following a rezoning to Multiple Residence, considering only the 2.7-acre upland portion of the Subject Property as opposed to the lands under waters, and assuming no access is granted to Lot

1035 for the development of surface parking. Development under the Multiple Residence (RM) zoning but with density-limited to the upland portion of the Subject Property would yield a total of 72 multi-family residential units. Similar to the Proposed Action, Alternative 3 would include a single multi-family residential building on the Subject Property, constructed with three residential stories above one partially below-grade parking level containing a total of 177 parking spaces. Alternative 3 would require the demolition of the existing buildings and structures on the Subject Property, and disturbance to the entire site to ready the area for redevelopment. This alternative would not be an economically viable alternative given the significant up-front investment required, the prices of comparable condominiums in the area and considering the break-even point for the Applicant. Based on the analysis, it is economically infeasible for the Applicant to develop the Subject Property in accordance with the Alternative 3 parameters. As such, this is not considered a reasonable alternative to the Proposed Action and would not be pursued by the Applicant.

1.7.4 Alternative 4: Rezone to Waterfront Business

Alternative 4 contemplates the potential redevelopment of the Subject Property facilitated by a rezoning to Waterfront Business. This development scenario would include the construction of an approximately 8,000-square-foot waterfront restaurant on the Subject Property and associated surface parking lot with 104 spaces. Pursuant to the Waterfront Business regulations, development under this scenario would require direct waterfront access for boats or would require a special use permit from the Town. Alternative 4 would require the demolition of the existing buildings and structures on the Subject Property, and disturbance to the entire site to ready the area for redevelopment, as the existing industrial use would be entirely replaced by a waterfront restaurant and surface parking area. The Applicant does not currently have any marine water-dependent commercial uses within its existing construction or management portfolio and has no plans or capacity to pursue this type of development product. The waterfront restaurant would also be wholly outside the explicit objective of the Applicant to create a vibrant, waterfront residential community that responds to the market demand for housing opportunities in Port Washington. The affordable housing units included as part of the Proposed Action would not be realized under this development scenario. Overall, it is the Applicant's opinion that this alternative does not represent the highest and best use for the Subject Property and would not help the Port Washington community capitalize on an opportunity to convert a Brownfield site into a productive residential and recreational property. Furthermore, similar to the prior alternatives, Alternative 4 would not be an economically viable alternative given the significant up-front investment required to remediate the Subject Property.

1.7.5 Alternative 5: Rezone to Planned Waterfront Residential Community

A rezoning of the Subject Property to the PWRC zoning would facilitate the development of a multi-family residential building with two residential floors and total yield of 40 units. A surface parking lot would be constructed adjacent to the residential building accommodating 80 parking spaces. While lower in intensity, many of the identified community benefits associated with the Proposed Action would not be realized under this alternative, including public access to the waterfront through the construction of a public pier and promenade, the marina use, and the accessory parking to support the adjacent uses at North Hempstead Beach Park. Also, similar to the other alternatives detailed above, Alternative 5 would not be an economically viable alternative given the significant up-front investment required for the Subject Property, the comparable prices and considering the break-even point for the Applicant. Alternative 5 is not considered a reasonable alternative to the Proposed Action and would not be pursued by the Applicant.

2

Description of the Proposed Action

2.1 Project Description and Setting

2.1.1 Introduction

This document is a Draft Environmental Impact Statement (DEIS) prepared in accordance with the State Environmental Quality Review Act (SEQRA) and its implementing regulations at 6 NYCRR Part 617 and the Final Scope adopted by the Town of North Hempstead Town Board ('Town Board") as lead agency on April 15, 2021 (**Appendix A**). This document analyzes the potential significant adverse environmental impacts and proposed mitigation measures associated with an application by SLC Development, LLC ("the Applicant"), which involves a change of zone of the Subject Property from R-AAA to Multiple Residence (RM) and site plan approval, among other permits/approvals (the "Proposed Action"), to allow for the construction of a 176-unit residential building (the "Proposed Building") with associated parking and amenities (the "Proposed Project").

The DEIS is divided into eight sections, the first of which is the Executive Summary. This section, **Section 2**, provides a brief summary of the existing site and surrounding area conditions, description of the Proposed Action/Proposed Project, history of property, site remediation, demolition and site clearing, and required permits and approvals.

Each of the subsections of **Section 3** identifies, with respect to each area of potential environmental impact, the existing conditions at the Subject Property (and, as applicable, the relevant impacts of the existing uses thereof) and the potential beneficial and adverse environmental impacts of the Proposed Action. Aspects of the Proposed Action that mitigate or avoid potential adverse impacts are also identified and discussed in each corresponding subsection.

Section 4 enumerates those short-term and long-term impacts described within the preceding section that cannot be fully mitigated. **Section 5** presents a brief discussion of human and natural resources consumed as a result of project implementation. Section 6 discusses the growth-inducing aspects of the Proposed Project. Alternatives and their

impacts are discussed in **Section 7** of the DEIS. Among these alternatives are the "No-Action" alternative that is required to be discussed pursuant to the SEQRA and its implementing regulations at 6 NYCRR Part 617. The final section, **Section 8**, presents a list of references used in the DEIS.

2.1.2 Summary of Existing Conditions

The 7.17-acre Subject Property (2.69 acres above mean high water [MHW] and 4.48 acres below MHW), is located on the east side of West Shore Road, adjacent to Hempstead Harbor, at 145 West Shore Road, in the hamlet of Port Washington (**Figure 2-1**). The Subject Property is designated on the Nassau County Land and Tax Map as Section 6—Block 053—Lots 1005A (2.04 acres controlled by the Applicant) and 1005B (5.13 acres currently titled in the Town of North Hempstead) (**Figure 2-2**). While the site is situated in Town's Residence AAA (R-AAA) zoning district, it is, and has been since at least 1936, developed with industrial uses. The Subject Property is currently improved with various structures, including an earth-filled pier/concrete platform, a masonry storage building, and remains of a wooden pier, all associated with an industrial use (i.e., construction/landscape supply storage). Vehicular access to the site is from one single curb-cut on West Shore Road. Additionally, a portion of the North Hempstead Beach Park (Section 6—Block 053—Lot 1035), which is proposed to be developed for parking, currently contains park vehicle storage/parking. A total of approximately 67,500 square feet (sf) of parking and landscaping improvements would be made adjacent to the Subject Property as part of the Proposed Action.

Figure 2-1: Site Location





145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Subject Property

Figure 2-2: Excerpt of Tax Map

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Subject Property



2.1.2.2 Surrounding Land Use

The immediate vicinity is characterized by large public recreational areas to the west and south with one remaining industrial use to the immediate north; Hempstead Harbor to the east and residential development to the north. Large open spaces include the North Hempstead Aerodrome to the west, the Harbor Links golf course to the southwest, and North Hempstead Beach Park to the south.

A more detailed discussion of Land Use is included in Section 3.5.2 of this DEIS.

2.1.2.3 Transportation Facilities

The Subject Property is located on West Shore Road, which is a County-owned arterial thoroughfare leading to the central business districts (CBDs) of Port Washington and Roslyn. Other roadways in the area that are included in the transportation analysis in **Section 3.6** include Main Street (via West Shore Road from Old Northern Boulevard to Railroad Avenue), Old Northern Boulevard, Beacon Hill Road, Port Washington Boulevard (NYS 101), Longview Road, Main Street (via Port Washington Boulevard), and South Bayles Avenue, which provides access to the Port Washington Branch of the Long Island Rail Road (LIRR) station.

The Port Washington train station is located on Main Street, approximately two miles from the Subject Property. Nassau County operates the Nassau Inter-County Express bus system throughout Nassau County. However, there are no routes operating along West Shore Road in the area.

A summary of the comprehensive Traffic Impact Study (TIS) is included in **Section 3.6** of this DEIS. The TIS in its entirety is included as **Appendix J.**

2.1.2.4 Community Facilities and Utilities

The Subject Property is located within the jurisdiction of the following service providers/utilities:

School District:	Port Washington Union Free School District (UFSD)
Fire:	Port Washington Fire Department
Ambulance:	Port Washington Fire Department/Nassau County Emergency Ambulance Bureau
Police:	Port Washington Police Department
Water:	Port Washington Water District
Sewer:	Out-of-district connection to Port Washington Water Pollution Control District, Nassau County Sewer District or other sewer system
Electricity:	PSEG Long Island
Natural Gas:	National Grid

In addition to the site's location within the above community service districts and utility service areas, the location of the Subject Property is such that additional community facilities and services, including parks and recreational facilities, are available in the vicinity of the site.

For example, North Hempstead Beach Park, Hempstead Harbor Shoreline Park, Harbor Links Golf Course and the North Hempstead Aerodrome are located near the Subject Property.

A complete discussion of community facilities and utilities is included in **Section 3.7** of this DEIS.

2.1.3 Proposed Action and Project Description

The Proposed Action involves a change of zone of the Subject Property from R-AAA to Multiple Residence (RM) and site plan approval to allow for the construction of a 176-unit residential building, consisting of five residential stories above two parking levels (including one that is partially underground). A total of 300 parking spaces would be provided at the Subject Property. Additionally, as a public benefit, the Applicant is proposing to construct a public promenade and pier and a 20-30-slip marina (for various-sized boats, including one slip dedicated to Town emergency service provider use), connecting the proposed development with North Hempstead Beach Park along Hempstead Harbor, generally within Lot 1005B.² The existing wooden pier and concrete platform would be removed and replaced with a new pier with outdoor amenities (see below for additional details regarding the marina). Access to the public promenade and pier would be via a breezeway through the proposed parking level of the building as well as via a walkway connecting to the adjacent North Hempstead Beach Park and Hempstead Harbor Shoreline Trail. The public promenade would be approximately 12 feet wide and approximately 1,500 feet long, connecting to the new "educational" viewing pier, which would be designed to pay homage to some of the site's history, speak to local marine and bird life, and provide space for public, family-friendly events. A bulkhead is proposed at the head of the marina, adjacent to the residential building. See Appendix C for the project drawings and site plan.

Vehicular access would be provided from one dual access drive at West Shore Road. Potable water would be provided by the Port Washington Water District, while sewage disposal is proposed to be via connection to the Port Washington Water Pollution Control District, the Nassau County or another local sewer district (as an out-of-district connection). The Proposed Project would include a sewer main and pump station to accommodate the residential building.

Although not part of the Subject Property and not subject to the change of zone application, as an additional public benefit, the Applicant is also proposing to develop the adjacent Town-owned Lot 1035 as accessory off-street parking, in accordance with the Terms of Town Resolution No. 454-2008 (see **Appendix B**). Specifically, the Resolution states if the Subject Property is rezoned or utilized in a manner consistent with the 2005 *Shared Vision Plan for the Port Washington Peninsula*, such as a private development with limited public access to the waterfront (such as a shorefront promenade), then the Town would authorize the use of a portion of Lot 1035 for vehicular parking to enable the maximum beneficial use of the Subject Property, and for the purpose of complying with parking requirements under any

² The proposed pier, marina, and a portion of the public promenade to be included as part of the Proposed Project are located on Section 6, Block 53, Lot 1005B of the Nassau County Land and Tax Map, which is currently titled in the Town of North Hempstead. These public improvements are intended to be constructed and maintained by the Applicant in perpetuity, and dedicated to public use through a recorded covenant.

applicable zoning ordinance. The public waterfront access and adjacent North Hempstead Beach Park would be served by the additional parking.

Aside from the public promenade, marina, and pier, the residential development would include an outdoor pool and spa for residents, situated within an outdoor seating area located on the north side of the Proposed Building. Other amenities for residents include a pet spa (washing station) on the B2/parking level, bicycle storage at the ground level and an indoor fitness area on the ground level adjacent to the outdoor pool and spa area.

Site improvements/features include a comprehensive stormwater management system, site lighting and extensive landscaping. A shuttle would also be provided to and from the Port Washington LIRR station and downtown Port Washington to facilitate access to public transit and reduce vehicle trips generated by the Proposed Project. In addition, the Applicant would provide the following benefits: access to the residents' lounge during shift changes for the Port Washington Police Department and a dedicated boat slip for Town emergency service provider use.

As described in more detail below and in **Section 3.2**, the Proposed Project would include environmental remediation of the site and removal of contaminated underwater and upland debris at the Applicant's sole cost and expense.

The proposed residential unit breakdown and size range of the 176 units are as follows:

- > One-Bedroom 80 units (870 square feet [SF]—1,326 SF)
- > Two-Bedroom 82 units (1,267 SF-1,544 SF)
- > Three-Bedroom 14 units (1,672 SF—2,300 SF)

The overwhelming majority of the units (92 percent) would have either one or two bedrooms. Based on this bedroom mix, a total of 378 new residents is projected, as detailed in **Section 3.7**, below.

It is noted that all affordable housing units created pursuant to the Long Island Workforce Housing Act "remain affordable. Subsequent purchasers of such units shall have at the time of purchase, pursuant to the definition of 'affordable workforce housing,' an income at or below one hundred thirty percent of the median income for the Nassau-Suffolk primary statistical area as defined by the federal Department of Housing and Urban Development." The workforce housing units would be integrated into the residential building and the interior finishes would be the same as the market-rate units.

With regard to the water-related features, the proposed marina would consist of floating docks, which would be laterally restrained by piles extending to the Base Flood Elevation (100-year) as provided in the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM). Fixed piers and bulkheads would be designed to be inundated by flood. The proposed pier, which is triangular in shape, would reduce the covered tidal area to 13,615 SF, "day-lighting" 14,365± SF of tidal area on the Subject Property. The proposed bulkhead would result in filling 7,665± SF of tidal waters offset by day-lighting 235± SF for a net filling of 7,430 SF. Proposed dredging would provide a minimum water depth of four feet during average low-tide with one-foot allowable over-dredge over a 72,185± SF area, resulting in 1,195± cubic yards (cy) of dredged material. See **Section 3.11** for additional details regarding the proposed marina, piers, and bulkheads.

Table 2-1 presents the existing and future anticipated land coverages for the Subject Property.

Type of Coverage	Existing Total Area (percent)	Existing Upland Area Only (percent)	Proposed Total Area (percent)	Proposed Upland Area Only (percent)	Total Change in Acres		
Roads, buildings, and other paved or impervious surfaces	2.36± (32.9%)	2.36± (32.9%)	1.40± (19.5%)	1.40± (19.5%)	- 0.96±		
Wetlands	4.48± (62.5%)	0 (0%)	4.73±* (66.0%)	0 (0%)	+ 0.25±*		
Non-vegetated	0.08± (1.1%)	0.08± (1.1%)	0.06± (0.8%)	0.06± (0.8%)	- 0.02±		
Lawn/Landscaping	0.25± (3.5%)	0.25± (3.5%)	0.46± (6.4%)	0.46± (6.4%)	+ 0.21±		
Pervious Pavement	0.00± (0%)	0.52± (7.3%)	0.52± (7.3%)	0.52± (7.3%)	+0.52±		
*The existing pier will be removed and replaced by a pier with a smaller footprint, thereby increasing the Subject Property's wetland area							

Table 2-1 Land Use and Covertype

*The existing pier will be removed and replaced by a pier with a smaller footprint, thereby increasing the Subject Property's wetland area.

2.1.3.2 Site Layout, Access, Circulation, and Parking

Access to the Subject Property would be provided at the proposed driveway directly onto West Shore Road. The driveway would be designed to provide safe and efficient features for vehicular movements into and out of the site. For drivers approaching the site from the north, the existing southbound left turn lane would be restriped to provide adequate length for vehicles waiting to make a left turn into the site. For drivers approaching the site from the south, vehicles would be able to make a right turn directly into the site. For drivers leaving the site, one exit lane would be provided for shared left and right turn movements.

Based on a review of the "Long Island Bikeways & Trailways Map" published by the New York State Department of Transportation (NYSDOT), and as confirmed by field observations, there are no signed bicycle routes or shared bicycle routes along West Shore Road. However, connections proposed between the Subject Property and the adjoining Town parks would facilitate pedestrian and bicycle access between these locations.

The on-site circulation layout, which would be subject to approval from the Nassau County Fire Marshal and the Port Washington Fire Department, has been designed to facilitate the movement of emergency vehicles. The layout would also accommodate the on-site circulation of moving vans, refuse trucks, and delivery vehicles.

Section 70-103.A(2) of the Code of the Town of North Hempstead (the "Town Code") requires that two-and-one-quarter (2.25) parking spaces be provided for each residential dwelling. On that basis, the proposed 176 dwelling units would require 396 spaces. As shown on the project site plan included in Appendix C, 300 parking spaces would be provided for the site, which includes 58 spaces to be developed on the adjacent Lot 1035, to be shared with visitors to North Hempstead Beach Park and the proposed on-site public promenade and pier. As detailed above, the Applicant is proposing to develop the adjacent Town-owned Lot 1035 as accessory off-street parking, in accordance with the Terms of Town Resolution No. 454-2008. A parking demand study demonstrating the adequacy of the parking provided is included in Section 3.6.3 of this DEIS.

A more detailed discussion of access and internal circulation is included in **Section 3.6** of the DEIS.

2.1.3.3 Construction Schedule and Staging

The Proposed Project would be constructed in a single phase, to take place over a 30-month construction period. Entry to the construction site would be located in the approximate location of the proposed future entrance driveway, with staging to occur on Lot 1035 and two tower cranes to be located one each in the northern and southern half of the Subject Property. See **Appendix C** for a Preliminary Site Logistics Plan for construction of the Proposed Project.

2.2 History of Property

As detailed in the Limited Phase II ESA completed for the Subject Property in December 2020 by P.W. Grosser Consulting, Inc., the Subject Property was first developed sometime prior to 1900, when piers extending into Hempstead Harbor were constructed. In 1936, the property was identified as Metropolitan Sand & Gravel Corp. Historic records indicate that uses on the Subject Property prior to the current sand and gravel storage use included ship maintenance and a steel fabrication shop.

While most land under water is in the public domain and is not privately owned, New York State does, in fact, recognize private ownership of underwater lands. The State may convey land under water to a private property owner through Letters-Patent.³ In the case of the Subject Property, the land under water was conveyed by the State of New York to the current property owner's predecessor, J.B. King & Co., under Letters-Patent dated December 7, 1907 and recorded in the Nassau County Clerk's office at Liber 54, Page 185 (see **Appendix D**). The Letters-Patent provide that the State has granted title to the land under water, and the land between high and low water mark to J.B. King & Co., its successors and assigns.

While the underwater land is in private ownership,⁴ the Applicant is not proposing to construct any part of the building over water or to reclaim/fill any submerged land, although that is expressly authorized by the Letters-Patent. Instead, the proposal is to seek a variance in order to condense the development yield for the full site acreage (7.17± acres) onto the upland portion and preserve the land under water for public use. The use of the underwater land is proposed to be for a public marina and pier, which is permitted by the Letters-Patent (see **Appendix D**).

³ An instrument issued by a government that conveys a right or title to a private individual or organization, including conveyances of land and inventions. (https://legal-dictionary.thefreedictionary.com/Letters+Patent)

⁴ The parcel in question is a waterfront parcel known as Section 6 Block 53 Lot 1005B on the Nassau County land and tax map. The most recent deed of record for this property is a deed from Harborfront Plaza Associates to Scotto Bros. Realty, Inc. in 1995. The Town of North Hempstead took title to the premises by virtue of a deed in 1955 from Metropolitan Sand and Gravel Corporation. The next deed of record for the parcel in question was given by Morewood Realty Corporation to Pittsburgh National Bank, as trustee for Morewood Realty Stockholders Liquidating Trust in 1986. Subsequent to that, Pittsburgh National Bank conveyed the property to Harborfront Plaza Associates in 1988. Since there are no instruments of record in which the Town relinquished their interest in the property, there appears to be a break in the chain of title.
2.2.1.1 Purpose, Need and Benefits

The purpose of the Proposed Action is to replace the existing industrial use on the Subject Property with a multi-family development of 176 units that would result in, among other things, a remediation of the existing property, transformation of an industrial use into a residential use in accordance with the *Shared Vision Plan for the Port Washington Peninsula* (Vision Plan), development of affordable housing, and provision of other public benefits that would satisfy identified needs of the community.

According to The SEQR Handbook:

"'Purpose' is a goal or objective to be achieved. The purpose of most privately sponsored projects is to make a profit from some development activity on their property... 'Need' is a lack of something required, desirable, or useful. The need for an action may be public, private, or a combination of both. Public need may apply to publicly or privately sponsored projects that satisfy a societal need, such as health care facilities, housing for the elderly, or new industry in an area of high unemployment. 'Benefit' is something that promotes wellbeing. The benefits of an action relate to satisfaction of need. An action may not always satisfy all identified needs.⁵

Granting the change of zone application would be, among other things, the catalyst necessary for the extensive environmental cleanup of the property and its redevelopment in accordance with the Vision Plan. Along with the improvements contemplated to the adjacent public park called for in the *Master Plan for the Town of North Hempstead Beach Park*, this redevelopment would continue and complement the reactivation of the east side of the Port Washington Peninsula. The public amenities included in the redevelopment of this property (including the provision of a public promenade and pier) would serve as a northward extension of the shoreline Hempstead Harbor Trail and would be consistent with the Vision Plan's goal to expand that trail. The proposed marina would provide the potential for public rental of marina slips. Together with the promenade and pier, introduction of the marina would increase recreational opportunities for the general public. See the project site plan included in **Appendix C** which shows how the Proposed Project complements the proposed upgrades to North Hempstead Beach Park.

The development of accessory parking on Lot 1035 by the Applicant at the North Hempstead Beach Park in accordance with the terms of the Town Resolution, constructed at no expense to the Town, would provide additional parking spaces for visitors to the park and the proposed on-site public promenade and pier. Additional benefits provided by the development include access to the residents' lounge during shift changes for the Port Washington Police Department and a dedicated boat slip for Town emergency service provider use; and shuttle service to and from the Port Washington LIRR station and downtown.

The proposed site remediation associated with the change of zone (including removal of underwater and shoreside debris), as detailed in **Section 3.2**, and subsequent development would convert a Brownfield site into a productive residential and recreational property, which would provide public access to a portion of the waterfront that has been closed off to the public for more than 50 years and improve the water quality of Hempstead Harbor.

⁵ The SEQR Handbook, 4th Edition, 2020, New York State Department of Environmental Conservation. Page 113

The NYSDEC's Brownfield Cleanup Program (BCP), which the Applicant intends to enter, is meant "to encourage private-sector cleanup and redevelopment of brownfield sites across New York State as a means to revitalize economically and environmentally blighted communities."⁶ The proposed site remediation would convert this Brownfield site into a usable and attractive site, which would provide benefits to the community as detailed above.

In addition, the Proposed Action is necessary to provide a high-quality multi-family residential development that meets the documented need for additional housing options on Long Island. According to population projections from the Long Island Index's study, *Long Island's Need for Multifamily Housing*, between 2016 and 2030, Long Island is projected to gain an additional 158,000 households, but only 64,000 housing units are anticipated to be built within that time frame.⁷ This study finds that the high housing costs on Long Island are primarily due to insufficient housing stock, supporting the need for high-density housing options on Long Island.

More broadly, the Proposed Action would support a housing type that is responsive to larger real estate trends toward an increasing, cross-generational demand for "surban" communities, or communities that provide a mix between suburban living and urban amenities including access to public transportation and downtown centers.⁸ Communities like Port Washington are experiencing the effects of these national trends, exhibited by the rising costs of housing for both sale and rental properties across Nassau County. These trends have only been accelerated by the COVID-19 pandemic, as residents from New York City have moved into Nassau County seeking more space and affordable housing options.⁹

Census data also support the need for additional or updated rental housing options at various price points. According to 2019 American Community Survey Five-Year Estimates, of the total housing units in Port Washington, less than five percent have been built in the last ten years, while slightly over 70 percent were built prior to 1960, indicating an aging housing stock in need of upgrading. In addition, a significant number of renter households in the community, just over 52 percent, are currently rent burdened, meaning they are spending more than 30 percent of their income on housing costs. This also indicates a need for affordable housing in the community. The Proposed Action's 17 affordable housing units would support additional housing supply for lower-income residents, who are more likely to experience cost-burden.

The target market for the proposed market-rate residential units would include retirees and empty-nesters looking to downsize from single-family homes but who wish to remain in the community, as well as young professionals looking for housing options with high-end amenities. The proportion of Port Washington households with a resident over the age of 65 increased from 29 percent in 2000 to 43.6 percent in 2018, according to the Regional Plan Association.¹⁰ The Proposed Action would serve the growing need for housing options

⁶ https://esd.ny.gov/brownfield-cleanup-program

⁷ Long Island Index. Long Island's Need for Multifamily Housing: Measuring How Much We Are Planning to Build vs. How Much We Need for Long Island's Future. February 2016. Available from http://www.longislandindex.org/data_posts/long-islands-needs-formultifamilyhousing-measuring-how-much-we-are-planning-to-build-vs-how-much-we-need-for-long-islands-future/

⁸ REBusiness Online. Not Urban, Not Suburban: Why Surban Living is Here to Stay. March 25, 2021. Available from https://rebusinessonline.com/not-urban-not-suburban-why-surban-living-is-here-to-stay/

⁹ Long Island Business News. Housing Crunch. October 30, 2020. Available from https://libn.com/2020/10/30/housing-crunch/

¹⁰ Regional Plan Association. Long Island Housing Profiles. Accessed August 9, 2021. Available at https://rpa.org/work/reports/long-island-housing-data-profiles

catering to this growing senior and empty-nester population. The Subject Property is an ideal location for this type of housing given its proximity to the waterfront and open space resources, as well as easy access to transit and local retail, dining, and personal services establishments.

Overall, the Proposed Action would provide positive change to the Subject Property and the surrounding community through significant site remediation on a Brownfield site and would support the provision of diversified housing options to the residents of Port Washington and Long Island, helping to shrink the gap between housing demand and availability and fill a need created by demonstrated housing trends in the community and across Nassau County. Moreover, the Proposed Action would expand public recreational facilities, augment the provision of emergency services and provide enhanced sewer infrastructure that would benefit North Hempstead Beach Park.

2.3 Site Remediation

In June 2020, VHB completed a Phase I Environmental Site Assessment (ESA) to determine recognized environmental conditions (RECs) (including historic [HRECs], controlled [CRECs], and/or business [BERs] conditions) present at the Subject Property (**Appendix E**). Based upon the results of the site inspection and records review undertaken as part of the Phase I ESA, VHB determined that there is one REC associated with the Subject Property, noting that:

Stockpiles of soils and construction and demolition (C&D) materials were observed on the northern-central and southern portions of the Subject Property. Additional soil stockpiles are present on the central portion of the Subject Property. Given the unknown quality of the stockpiles, soil samples should be collected in accordance with NYSDEC regulations prior to off-site disposal.

In addition, VHB determined there were several BERs associated with the Subject Property, as follows:

- > Three portable 110±-gallon diesel ASTs are present on the Subject Property, to the southwest of the existing office/storage building.
- > The Subject Property had previously consisted of several commercial buildings, which have since been demolished. There is a potential for previous building footings and materials to be buried subgrade.
- Given the close proximity of the Subject Property to NYSDEC-regulated wetlands, NYSDEC Tidal Wetlands, freshwater wetlands and federal wetlands, permitting and/or consultations may be required.
- According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the Subject Property is located within the 100-year flood zone. As such, there is a risk of flooding at the Subject Property.
- Based on the age of the existing masonry storage building and the existing office/storage building (i.e., constructed circa 1958), there is a potential for lead-based paint (LBP) to be present within these structures.
- Based upon the age of the existing masonry storage building and the existing office/storage building (i.e., constructed circa 1958), there is a potential for asbestos

containing materials (ACM) to be present within these structures. ACM is subject to federal disposal restrictions and should be dealt with as part of standard demolition and/or renovation practices in accordance with applicable regulations.

- Based upon the age of the existing masonry storage building and the existing office/storage building (i.e., constructed circa 1958), there is a potential for polychlorinated biphenyls (PCBs) to be present in building materials. PCBs are subject to federal disposal restrictions and should be dealt with as part of standard demolition and/or renovation practices in accordance with applicable regulations.
- > The northwestern portion of the Subject Property consists of a vehicle storage area containing numerous vehicles, boats, forklifts, payloaders, and other machinery. Based upon the longevity of storage of the aforementioned vehicles and machinery, there is a potential for the release of fuel and/or hydraulic fluid. Surficial staining was not observed within accessible areas of the vehicle storage area. However, the potential for a release represents a BER for the Subject Property.
- > The on-site stockpiles of mulch have the potential to produce a runoff of manganese into Hempstead Harbor. Same represents a BER for the Subject Property.

In December 2020, P.W. Grosser Consulting, Inc. (PWGC) completed a Limited Phase II ESA (**Appendix F**) to further evaluate potential impacts associated with the REC identified in VHB's Phase I ESA (i.e., the C&D stockpiles). In addition, based on PWGC's prior knowledge of the Subject Property, the following additional RECs, aside from the C&D stockpiles, were identified:

- A suspected abandoned floor-drain and sump/pit were identified in the steel fabrication building. These structures present a potential conduit for contamination to migrate to the subsurface. Potential illicit discharges to the subsurface represent a REC.
- Three suspected Underground Storage Tanks (USTs) were noted within the Subject Property. These USTs can act as a source for surface or subsurface spills to have occurred, which could have impacted site soils and groundwater, representing a REC.
- > A fueling truck, as well as several abandoned vehicles, were identified on the Subject Property. There was evidence of staining in the unpaved vicinity of these vehicles, indicating leaks may have occurred, which represents a REC.
- Historical dumping, including washing machines and other types of debris, was reported to have occurred on the northern portion of the Subject Property, which PWGC believes is a REC.

With regard to the identified C&D stockpiles, since the writing of the Limited Phase II ESA, an Order on Consent was agreed upon between the current property owner and the NYSDEC. In accordance with same, the current property owner removed the C&D stockpiles from the Subject Property in conformance with the prevailing regulations; the current property owner provided NYSDEC with documentation detailing the completion of the removal activities and is awaiting termination of the Order on Consent.

In accordance with the recommendations of the Phase I ESA and Limited Phase II ESA, implementation of the Proposed Action would require the completion of various remediation activities, as described below.

The Phase I ESA noted the presence of various hazardous materials throughout the Subject Property, which specifically included:

- > Maintenance products (cleaning supplies, painting supplies)
- > Gasoline cans
- > 55-gallon storage drums containing engine oil and hydraulic oil
- > Compressed gas cylinders.

The Phase I ESA indicated that the hazardous materials listed above should be removed from the Subject Property prior to the demolition of the existing structures. As such, prior to the implementation of the Proposed Action, these materials would be removed from the Subject Property and disposed of in conformance with prevailing regulations.

In addition, the Limited Phase II ESA recommended that further actions be taken to remediate areas affected by petroleum-related contamination. According to PWGC, it is also anticipated that there is a UST that will have to be removed prior to implementation of the Proposed Action.

In June 2022, PWGC conducted a Supplemental Phase II ESA, the purpose of which was to further evaluate RECs identified in a Phase I ESA report prepared by VHB in 2020 and address data gaps from PWGC's Limited Phase II ESA prepared in 2020 (**Appendix F**) Sampling was performed by PWGC in onshore and offshore locations.

Based on the results of the sampling, the following are the findings and recommendations:

- > The suspected UST near the central portion of the site should be properly closed and removed. Based on petroleum impact detected during PWGC's 2020 Limited Phase II ESA and the Supplemental Phase II ESA, it appears that petroleum impacted soil and groundwater is present in the vicinity of this suspected UST. Such impact should be addressed during removal of the tank in accordance with NYSDEC procedures.
- Semi-Volatile Organic Compounds (SVOCs), pesticides and metals in excess of Unrestricted Use Soil Cleanup Objectives (UUSCOs) were detected in soil samples collected from the onshore portion of the site. Metals in excess of UUSCOs were detected in soil samples collected from the offshore portions of the site. As future plans for the site consist of redeveloping the property, including construction of a residential building and marina, PWGC recommends that a Soil and Materials Management Plan (SMMP) be prepared to properly manage impacted soils in accordance with applicable federal, state, and local regulations.

In association with the undertaking of the remediation activities described above, the Applicant will apply to the NYSDEC for the Subject Property to be entered into the New York State BCP. By entering the BCP, remediation activities would be undertaken under the oversight of the NYSDEC and the Nassau County Department of Health, and these agencies would ensure that the redevelopment of the Subject Property is undertaken in a manner that would not result in an adverse risk to human health or the environment. Further, entering the BCP would guarantee transparency by requiring that the public be informed of, and invited to comment on, each step of the proposed remediation activities.

As part of the BCP process, a site-specific Remedial Action Work Plan (RAWP) would be prepared. It would include, among other things, mitigation measures designed to remove

the various RECs located on the Subject Property and preclude adverse risks to human health or the environment, including, but not limited to:

- > The establishment of a Citizens Participation Plan, which would inform the community of any important project updates and notify, if necessary, of any potential public safety hazards.
- > The establishment of soil cleanup objectives that, once achieved, would improve the quality of subsurface conditions.
- > The establishment of a Community Air Monitoring Plan that would detail the proposed dust and soil vapor monitoring and management protocols.
- > The installation of construction fencing to prevent off-site personnel from entering the site.
- > The use of on-site security personnel outside of normal working hours (potential).
- > The installation of a truck wash station to reduce off-site soil transport, as well as other erosion and sediment control measures.

Overall, the Proposed Action would incorporate mitigation measures that would minimize, to the greatest extent feasible, the potential for adverse impacts associated with the remediation of the Subject Property.

2.4 Demolition and Site Clearing

Demolition equipment to be utilized on the Subject Property would include bulldozers, track excavators, and front-end loaders. The Applicant would make use of roll off dumpsters to be located on-site to transport demolition material. A wash station would be utilized for all dumpsters and trucks before heading off-site for disposal. The anticipated egress route for material transport would be via West Shore Road to Northern Boulevard or the Long Island Expressway. Disposal of materials, including hazardous or contaminated materials, would be contracted through the Jamaica Ash & Rubbish Removal Co. Inc. to ensure proper disposal procedures.

The following items would be removed from the Subject Property as part of site clearing and demolition:

- > Upside-down barge being used for site storage
- > 25 banks storing construction aggregate (e.g., sand, stone, and limestone)
- > Masonry building
- > Dilapidated cars and construction equipment
- > Six dilapidated boats or sunken barges
- > A 50-by-100-foot sunken floating dock
- > Wood piles and other remains of a wooden pier
- > Steel trellis, track, and caging associated with former dry dock
- > One underground storage tank
- > 20- to 40-foot polyethylene pipes

2.5 Required Permits and Approvals

In order to implement the Proposed Action, the following permits, approvals, referrals and reviews are required (see **Table 2-2**).

Agency	Permit/Approval	
North Hempstead Town Board	Change of Zone, Site Plan Approval	
North Hempstead Board of Zoning Appeals	Area Variances: height; buffer area; parking; front yard; side yard; rear yard; density; lot coverage; recreational area; floor area	
North Hempstead Building Department	Building Permit	
North Hempstead Town Clerk	Structures-in-Waterways Permit	
North Hempstead Waterfront Advisory Committee	Review of Pier and Marina	
Port Washington Fire Department	Sprinkler System, Emergency Egress, Site Plan Review	
Nassau County Planning Commission	GML 239-m Referral	
Nassau County Department of Public Works	GML 239-f Review and Approval	
Nassau County Fire Marshal	Sprinkler System, Emergency Egress, Site Plan	
Nassau County Health Department	Stormwater Management, Backflow Prevention	
New York State Department of Environmental Conservation	SPDES General Permit for Stormwater Discharges for Construction Activities (GP-0- 20-001); Article 25 Tidal Wetlands Permit; Section 401 Water Quality Certification; Protection of Waters Permit (Excavation & Fill in Navigable Waters; Docks, Moorings, or Platforms)	
New York State Department of State	Consistency Review with New York State Coastal Policies	
New York State Office of General Services	Permits (Lands Under Water; Docks, Moorings or Platforms)	
United States Army Corps of Engineers	Section 404 Clean Water Act; Section 10 Rivers & Harbors Act of 1899	
Port Washington Water District	Water Service Connection	
Port Washington Water Pollution Control District	Sewer Service Connection	
PSEG - Long Island	Electric Utility Connection	
National Grid	Natural Gas Connection	
Nassau County Industrial Development Agency	Financial Assistance	

Table 2-2 Required Permits, Approvals, Referrals and Reviews

3

Analysis of Potential Impacts

3.1 Soils and Topography

3.1.1 Regulatory Framework

The following policies and programs are relevant to the soils and topography of the Subject Property.

3.1.1.1 State Pollutant Discharge Elimination System—General Permit for Stormwater Discharges from Construction Activity

Construction activities disturbing one or more acres of soil must obtain a General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) from the New York State Department of Environmental Conservation (NYSDEC).¹¹ Pursuant to GP-0-20-001, a Stormwater Pollution Prevention Plan (SWPPP)¹² must be developed and submitted to the NYSDEC (Notice of Intent), as well as the local authority (i.e., the Town of North Hempstead), prior to the commencement of construction activities. The SWPPP must demonstrate compliance with the requirements of the NYSDEC, as well as the requirements of the local authority (see below).

3.1.1.2 Town of North Hempstead—Stormwater Management and Sediment and Erosion Control

The Town of North Hempstead's SWPPP requirements are enumerated in Chapter 46A of the Code of the Town of North Hempstead (the "Town Code"). Chapter 46A identifies specific design components (i.e., erosion and sediment control measures) and technical standards that a proposed SWPPP must satisfy. In addition, this chapter of the Code details

¹¹ New York State Department of Environmental Conservation. *SPDES General Permit for Stormwater Discharges from Construction Activity. Permit No. GP-0-20-001.* Available at: https://www.dec.ny.gov/docs/water_pdf/constgp020001.pdf. Accessed July 2021.

¹² A SWPPP is a construction management document that includes a detailed erosion and sediment control plan to manage stormwater generated on-site during construction activities.

maintenance and inspection requirements that must be followed through the completion of construction. A proposed SWPPP must be reviewed and accepted by the Stormwater Management Officer of the Town to ensure compliance with the above.

3.1.1.3 Town of North Hempstead—Grading and Soil Removal

Chapter 25 of the Town Code, Grading and Soil Removal, was established to regulate the grading or filling of land and topsoil removal within the Town. Pursuant to this chapter of the Town Code, a permit must be obtained from the Town of North Hempstead Building Department prior to the commencement of any grading, filling, or topsoil removal activities. Chapter 25 enumerates the permit application requirements and other procedural items.

3.1.2 Existing Conditions

3.1.2.1 Soils

The United States Department of Agriculture's *Web Soil Survey*¹³ indicates that the Subject Property contains the following soil/land types: Urban land (Ug); Water (W); Udipsamments, nearly level (UdA); and Beaches, sand (Bc); less than 0.1 percent of the property is classified as Urban land-Udipsamments Complex (Uu) and will not be discussed further (**Figure 3-1**). The majority (93 percent) of the Subject Property comprises either Ug or W soil/land types (**Table 3-1**). The remaining soil/land types, UdA and Bc, are confined to small areas near the Subject Property's northwest and southeast boundaries, respectively.

Symbol	Soil/Land Type	Approximate Percentage (%) of Subject Property		
Ug	Urban Land	47.1±		
W	Water	46.0±		
UdA	Udipsamments, nearly level	3.8±		
Вс	Beaches, sand	3.1±		

Table 3-1 Subject Property Soil/Land Types

Source: USDA Natural Resources Conservation Service. Web Soil Survey.

The *Web Soil Survey* indicates that the portion of Lot 1035 (to be redeveloped as part of the Proposed Action) contains UdA and Ug soil/land types only (**Table 3-2**). Generally, the Ug soil type is found along this portion of Lot 1035's eastern boundary with the Subject Property; the UdA soil type comprises the remainder of this portion of Lot 1035 (**Figure 3-1**).

¹³ United States Department of Agriculture. Natural Resources Conservation Service. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed July 2021.



Figure 3-1 Existing Soils

Source: NYS Ortho Imagery (2020); USDA Soil Survey SSURGO

Water (W)

Symbol	Soil/Land Type	Approximate Percentage (%) of Subject Property
UdA	Udipsamments, nearly level	73.1±
Ug	Urban Land	23.9±

Table 3-2 Portion of Lot 1035 Soil/Land Types

Source: USDA Natural Resources Conservation Service. Web Soil Survey.

The *Soil Survey of Nassau County*¹⁴ (the "*Soil Survey*") defines the general characteristics of the soil types found within the Subject Property and the portion of Lot 1035 included as part of the Proposed Action, as follows. It is noted that the *Soil Survey* does not provide information for the Water classification.

Urban Land

This unit consists of urban areas where a high percentage of the surface is a manmade impervious cover...The areas of Urban land consist of buildings, roads, parking lots, driveways, and other similar features...Very few undisturbed sites are in this unit...Most of the precipitation falling on this unit is channeled through storm sewers into ground-water recharge basins.

Udipsamments, Nearly Level

This unit consists of manmade fills or borrow areas, most of which are grass covered. In some areas the original soil material has been stripped and moved, and others consist of sandy fill material...The soils are very deep and excessively drained to well drained.

Beaches, Sand

This unit consists of strips of nearly level or gently sloping sand or sand and gravel. These areas are inundated twice each day with saltwater at high tide. Wind and tides move much of the material, especially the sand, and most of the areas have no plant cover.

The *Soil Survey* also provides information regarding the potential limitations to development that different soil types may possess. However, with regard to the soil types found within the Subject Property and the portion of Lot 1035 included under the Proposed Action, the *Soil Survey* only provides information on the Urban land soil type, as outlined in **Table 3-3**, below.

		5		
		Dwellings with	Local Roads and	Lawns and
Symbol	Mapping Unit	Basements	Streets	Landscaping
Ug	Urban Land	Slight	Slight	Moderate: too sandy

Table 3-3 Soil Engineering and Planning Limitations

Source: Soil Survey of Nassau County, New York.

¹⁴ John P. Wulforst, Soil conservation Service. Soil Survey of Nassau County, New York. Available at: https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/new_york/NY059/0/nassau.pdf. Accessed July 2021.

Based on the above, the upland portions of the Subject Property (i.e., those areas not classified as Water) are nearly entirely composed of previously disturbed soil/land types (i.e., Urban land and Udipsamments, nearly level). The portion of Lot 1035 included as part of the Proposed Action is entirely composed of previously disturbed soil/land types. Further, where provided, the *Soil Survey* indicates that the soil types found on-site, and within Lot 1035, do not present any severe engineering or planning limitations.

It is important to note the Soil Survey indicates that

[t]he objective of soil mapping is not to delineate pure taxonomic classes of soils, but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but <u>onsite investigation is needed to</u> <u>plan for intensive uses in small areas</u> (emphasis added).

Therefore, due to the generalities of the above-described soil types, and the potential for on-site soils to differ from the *Soil Survey*, a site-specific geotechnical investigation was performed by P.W. Grosser Consulting, Inc. (PWGC) in November and December 2020 to characterize soils on the Subject Property and describe potential engineering limitations. Land Air Water Environmental Services (LAWES) conducted the drilling. A summary of same follows; the full report is included in **Appendix G**. The site-specific geotechnical investigation was performed within the Subject Property only and, thus, do not address soils within the portion of Lot 1035 included as part of the Proposed Action.

The investigation involved a total of eight test borings at various locations throughout the Subject Property. Each of the test borings was drilled from ground surface to a minimum of 37± feet below grade surface (bgs) or to refusal; two of the borings were advanced to a depth of 52± feet bgs, and one boring was advanced to a depth of 101± feet bgs. Soil samples were collected continuously for the top 16± feet and then every 5± feet thereafter, to the bottom of each respective boring. The locations and respective depths of each boring are mapped on the *Boring Location Plan* provided by PWGC (**Figure 3-2**).

The borings revealed that drilled areas are generally covered by $14\pm$ feet of fill material comprising, among other materials, brown coarse to fine grained sands, silty sands, gravel, and asphalt. It is noted that fill is also likely to be found in the subsurface in the proximity of the warehouse on the northern side of the property and near the eastern boundary of the site (i.e., along the shoreline). The fill materials were classified as SP,¹⁵ SM,¹⁶ or GP¹⁷ in accordance with the Unified Soil Classification System. Some of this material is considered not suitable for foundation bearing due to the material's heterogeneity (mix of materials). The soils noted above are underlain, generally, by a layer of brown silty sands containing trace amounts of gravel; this layer generally extended to a depth of $37\pm$ feet bgs. Further below, generally extending to a depth of $52\pm$ feet bgs, was a layer of coarse- to fine-grained brown sands, with trace to little amounts of gravel. A layer of brown clayey sand or brown sandy clay was also found exclusively in boring location B-4, at a depth of $49\pm$ to $69\pm$ feet bgs.

¹⁵ Poorly graded sands, gravelly sands, little or no fines.

¹⁶ Silty sands, sands silt mixtures.

¹⁷ Well-graded gravels, gravel-sand mixtures, little or no fines.

Figure 3-2: Soil Boring Locations

West Shore Residences



145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Based on the results of the geotechnical report, PWGC made the following recommendations pertaining to the future installation of building foundations within the Subject Property:

- > Building foundations and floor slabs should be supported by a deep foundation system that extends through existing fills and loose silty sands. Ground floor slabs should be structurally supported by pile caps, grade beams, and additional piles driven as needed.
- > For slab on grade construction, surface soils should be removed to a minimum of one foot below the current ground surface and be proof rolled with a vibratory roller.
- > Areas below all slabs on grade should be backfilled with free draining compacted backfill. A layer of three-quarter-inch gravel and a vapor barrier should be installed on top of the compacted backfill, to the underside of the slab.
- > If driven, concrete-filled steel pipe piles or tapered still piles are utilized, driving criteria should be determined using a wave equation analysis.
- > Based on the presence of uncontrolled fill with debris, some spudding or predrilling may be necessary to advance piles without damaging or misaligning same.
- > Concrete should be placed as quickly as possible to avoid exposure of the foundation sub-soils to wetting, drying or freezing. Footings shall not be constructed on frozen or wet subgrade materials.

The geotechnical investigation also monitored groundwater levels within the soil boring locations. In addition, a dedicated groundwater monitoring well was installed to examine depth to groundwater and tidal influences. Depth to groundwater within the soil borings was estimated to be $8\pm$ to $17\pm$ feet bgs. Depth to water within the groundwater monitoring well was estimated to be $11\pm$ to $12\pm$ feet bgs; it was noted that groundwater levels fluctuated by approximately 1.5 feet during each 12-hour tidal cycle.

3.1.2.2 Topography

A review of the United States Geological Survey (USGS) Topographic Map (Sea Cliff Quadrangle, 2016), USGS LiDAR elevation data,¹⁸ and the site-specific Topographic Survey (Scalice Land Surveying, December 2020, **Appendix H**), indicates that elevations at the Subject Property range from 4-to-30 \pm feet above mean sea level (amsl) (NAVD 88)¹⁹ (**Figure 3-3**).

The Subject Property's lowest elevations on the upland portion (i.e., $4\pm$ feet amsl) are found in the northeast portion of the site, along the shorefront of Hempstead Harbor. Elevation generally increases moving east to west (i.e., from the shorefront towards the middle of the Subject Property), peaking at a high of $30\pm$ feet amsl in the northwesternmost corner of the site. From this peak, the elevation decreases towards West Shore Road to $18\pm$ feet amsl.

¹⁸ United States Geological Survey. Nassau County 2-ft Contours (2014). Available at: https://gis.ny.gov/elevation/contours/contoursnassau.htm. Accessed July 2021.

¹⁹ North American Vertical Datum of 1988. A vertical datum is a surface of zero elevation to which heights of various points are referred in order that those heights are in a consistent system. More broadly, a vertical datum is the entire system of the zero-elevation surface and methods of determining heights relative to that surface. In 1993, NAVD 88 was affirmed as the official vertical datum in the National Spatial Reference System (NSRS) for the Conterminous United States and Alaska (https://www.ngs.noaa.gov/datums/vertical/).

Figure 3-3: Topography West Shore Residences



145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Portion of Lot 1035

2-Foot Contour

The same topographic variation (i.e., rising from east to west, peaking in the center of the Subject Property, then decreasing towards West Shore Road) is generally seen throughout the remainder of the Subject Property. From near the existing concrete platform, elevations range from a low of $6\pm$ feet amsl, rising to a high of $27\pm$ feet amsl near the middle of the Subject Property, then decreasing to $17\pm$ feet amsl near West Shore Road. Towards the southern portion of the Subject Property, near the existing remains of the wooden pier, elevations again rise from the east towards the middle of the Subject Property (i.e., from $9\pm$ to $27\pm$ feet amsl), then decrease moving west towards West Shore Road (i.e., to $15\pm$ feet amsl).

Overall, as described above, elevation within the Subject Property is generally lowest along the shorefront of Hempstead Harbor, peaks near the middle of the Subject Property, then decreases gradually moving towards West Shore Road.

The USGS Topographic Map and USGS LiDAR elevation data indicate that elevations within the portion of Lot 1035 included under the Proposed Action range from 14-to- $20\pm$ feet amsl. The lowest elevations are found in the southeast area of this portion of Lot 1035; the highest elevations are found in the northeast area of this portion of Lot 1035. Generally, this portion of Lot 1035 is relatively flat, sloping upwards gradually from its eastern boundary (i.e., adjacent to the Subject Property) to its western boundary (i.e., toward West Shore Road).

3.1.3 Potential Impacts

3.1.3.1 Soils

Implementation of the Proposed Action would result in the disturbance of soils for foundation excavation, utility installation, grading, paving, and landscaping. However, as noted above, the upland portions of the Subject Property are nearly entirely comprised of previously disturbed soil/land types (i.e., Urban land and Udipsamments, nearly level). As such, throughout the majority of the Subject Property, the original soil types do not exist at or near the surface. Thus, while these portions of the Subject Property would be disturbed during construction/grading activities, no naturally occurring soils at or near the surface would be impacted by same. It is noted that the entirety of the portion of Lot 1035 included under the Proposed Action also contains previously disturbed soil/land types and, as such, does not contain the original soil types at or near the surface. Thus, the Proposed Action would not disturb naturally occurring soils within this portion of Lot 1035.

The remaining upland portions of the Subject Property (i.e., those areas classified as Beaches, sand) may contain naturally occurring soils. However, the Proposed Project has been designed to minimize the amount of grading/land work within these portions of the Subject Property. As such, potential impacts to naturally occurring soils in these portions of the Subject Property would be minimized.

Detailed discussions on the potential impacts within the portions of the Subject Property categorized as Water are included in **Section 3.3**, **Section 3.4**, and **Section 3.11**.

As described above, PWGC's geotechnical report (**Appendix G**) made recommendations pertaining to the future installation of building foundations within the Subject Property. The Proposed Project would be undertaken in a manner that is consistent with these

recommendations. As such, no significant adverse impacts associated with the installation of building foundations are expected.

It is noted that the Proposed Action would disturb more than one acre of soil and, thus, would require coverage under GP-0-20-001. As such, and in accordance with the requirements of the NYSDEC and the Town of North Hempstead (**Section 3.1.1**), a SWPPP would be developed and implemented prior to the commencement of construction activities.

As a primary component of the SWPPP, an erosion and sediment control plan detailing the specific erosion and sediment control measures to be implemented, their design, and locations (subject to adjustment for field conditions) would be developed. It is anticipated that the erosion and sediment control plan would include, but not be limited to, the following measures:

- > Existing vegetation to remain would be protected and remain undisturbed.
- > Drainage inlets would be protected from sediment build-up through the use of sediment barriers, sediment traps, etc., as required.
- > Clearing and grading would be scheduled in order to minimize the size of the exposed area and the length of time the area is exposed.
- > Sediment barriers (silt fences, hay bales, etc.) would be installed prior to any grading work along the limits of disturbance; same would be maintained for the duration of the proposed work.
- > Graded and stripped areas and stockpiles would be kept stabilized through the use of temporary seeding, or other effective cover, as required.
- > Fugitive dust control measures, such as the covering of stockpiles, temporary seeding, use of a water truck during extended dry periods, etc., would be implemented as needed.
- > A stabilized construction entrance would be maintained to prevent soil and loose debris from being tracked onto area roadways.

These measures would be implemented within the Subject Property as well as within the portion of Lot 1035 included under the Proposed Action.

In accordance with the requirements of Chapter 46A of the Town Code, all erosion and sediment control measures would be designed to be consistent with the relevant portions of the *New York State Stormwater Management Design Manual* (NYSDEC, 2015) and the *New York State Standards and Specifications for Erosion and Sediment Control* (NYSDEC, 2016). The proposed erosion and sediment control measures would be inspected on a regular basis, and at each of the construction milestones identified under Chapter 46A of the Town Code. The proposed erosion and sediment control measures would be maintained throughout the duration of construction and would be repaired or replaced, as needed, to ensure proper working condition.

With the aforementioned control measures employed in accordance with a SWPPP, which would be reviewed and approved by the Town's Stormwater Management Officer, the Proposed Action would not be expected to result in significant adverse impacts to soils within either the Subject Property or the portion of Lot 1035 included under the Proposed Action.

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3.1.3.2 Topography

As with any development project, the disturbance of soil (as described above) and the grading of land would occur during site development. Implementation of the Proposed Action would require the clearing of all existing structures. In addition, disturbance would be necessary to achieve the proposed grades and prepare the Subject Property for the construction of the Proposed Building. It is anticipated that these activities will require a net export of 15,500± cubic yards (cy) of soils and excavated materials from the Subject Property.²⁰ All excavated materials would be disposed of in accordance with prevailing regulations.

A *Grading and Drainage Plan* has been prepared for the Proposed Project, which is provided in **Appendix C.** The *Grading and Drainage Plan* demonstrates that following the implementation of the Proposed Action, elevations would range from approximately 9 feet amsl to 18 feet amsl. Elevations would be lowest at the proposed public pier and promenade and along the proposed bulkhead. Elevations would be highest along the northern and western portions of the Proposed Building.

Generally, elevations would increase moving east to west across the Subject Property. Near the northernmost portion of the Proposed Building, elevations would increase steeply (i.e., an approximate 33% slope) from $10\pm$ feet amsl to a plateau of $18\pm$ feet amsl. Elevations would then decrease gradually moving west towards West Shore Road, and through Lot 1035, to meet the existing elevations of same (i.e., 16-to-17 \pm feet amsl).

Within the central portion of the Subject Property (i.e., near the proposed public pier and promenade and marina), elevations would be less variable. To the east of the Proposed Building, elevations would remain at 9± feet amsl. To the west of the Proposed Building, and continuing through Lot 1035, elevations would decrease slightly from 18± feet amsl to meet the existing elevations of West Shore Road.

In the southern portion of the Subject Property (i.e., to the south of the Proposed Building), elevations would rise gradually towards the northwest. This topographic change would continue through Lot 1035, rising from an elevation of approximately 12 feet amsl to meet the grade of West Shore Road (i.e., 16-to-17 feet amsl).

As demonstrated in **Table 3-4**, the Subject Property would be much flatter following the implementation of the Proposed Action. The undulations in topography would be removed and the Subject Property would generally be graded to have a gentle pitch downwards towards Hempstead Harbor. It is also noted that the Subject Property would be graded to direct stormwater runoff towards the proposed stormwater management infrastructure (i.e., leaching galleys); a detailed description of the proposed stormwater management infrastructure is provided in **Section 3.3.3**.

²⁰ The estimate of net export of material is preliminary and is limited to the Subject Property (does not include the portion of Lot 1035). This estimate does include the formerly identified C&D stockpiles on the Subject Property, which have since been removed from the Subject Property in conformance with prevailing regulations. Therefore, this is a conservative estimate of net export.

Percent Slopes	Existing	Proposed
0-10%	93%	98%
10-15%	2%	1%
15% or greater	5%	1%

Table 3-4 Existing and Proposed Slopes

It is noted that in association with its historic uses, the Subject Property has previously been substantially graded and disturbed. As such, the Proposed Action would not result in any alterations to the Subject Property's natural topography, as same has previously been substantially altered.

3.1.4 **Proposed Mitigation**

No significant adverse environmental impacts to soils and topography have been identified. However, the Proposed Action has incorporated numerous measures aimed at minimizing the potential impacts to soils and topography, including the following:

- > A SWPPP would be developed and implemented in accordance with the requirements of the NYSDEC and the Town of North Hempstead.
- > As part of the SWPPP, a detailed erosion and sediment control plan, identifying the specific erosion and sediment control measures to be implemented, would be developed.
- > Drainage inlets would be protected from sediment build-up through the use of sediment barriers, sediment traps, etc., as required.
- > Clearing and grading would be scheduled in order to minimize the size of the exposed area and the length of time the area is exposed.
- Sediment barriers (silt fences, hay bales, etc.) would be installed prior to any grading work along the limits of disturbance; same would be maintained for the duration of the proposed work.
- > Graded and stripped areas and stockpiles would be kept stabilized through the use of temporary seeding, or other effective covering, as required.
- > Fugitive dust control measures, such as the covering of stockpiles, temporary seeding, use of a water truck during extended dry periods, etc., would be implemented as needed.
- > A stabilized construction entrance would be maintained to prevent soil and loose debris from being tracked onto area roadways.

3.2 Subsurface Conditions

3.2.1 Regulatory Framework

A summary of the various regulatory requirements and programs that guide the investigation, reporting, and remediation of hazardous materials is provided below.

3.2.1.1 American Society of Testing and Materials Practice E1527-13

American Society of Testing and Materials (ASTM) Practice E1527-13 was set forth to define good customary practices for conducting a Phase I Environmental Site Assessment (ESA). Included under ASTM Practice E1527-13 is the United States Environmental Protection Agency's (USEPA or EPA) "all appropriate inquiry" requirement, which establishes specific regulatory requirements for conducting all appropriate inquiries into the previous ownership, uses, and environmental conditions of a property for the purposes of qualifying for certain landowner liability protections under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). As such, ASTM Practice E1527-13 provides a comprehensive set of practices designed to identify, to the extent feasible, the range of contaminants within the scope of CERCLA and petroleum products.

ASTM Practice E1527-13 requires that a Phase I ESA specifically consist of the following four components: records review; site reconnaissance; interviews with past and present owners and occupants; and evaluation and reporting. Additional details regarding the requirements of ASTM Practice E1527-13 are provided in **Appendix E**.

3.2.1.2 American Society of Testing and Materials Practice E1903-11

ASTM Practice E1903-11 defines a standard process for conducting a Phase II ESA, with respect to the presence or the likely presence of substances including, but not limited to, those within the scope of the CERCLA, pollutants, contaminants, petroleum and petroleum products, and controlled substances and constituents thereof. ASTM Practice E1903-11 specifies procedures based on the scientific method to characterize property conditions in an objective, representative, reproducible, and defensible manner. To promote clarity in defining Phase II ESA objectives and transparency in communicating and interpreting Phase II ESA results, this practice specifies adherence to requirements for documenting the scope of assessment and constraints on the conduct of the assessment process.²¹

3.2.1.3 NYSDEC Division of Environmental Remediation—Technical Guidance for Site Investigation and Remediation

The NYSDEC Division of Environmental Remediation's (DER) Technical Guidance for Site Investigation and Remediation (DER-10) provides an overview of the site investigation and remediation process for the NYSDEC's remedial programs. These programs include: the Inactive Hazardous Waste Disposal Site Remedial Program, known as the State Superfund Program; Brownfield Cleanup Program (detailed below); Environmental Restoration Program; the Voluntary Cleanup Program; and certain petroleum releases. DER-10 provides the scope of activities needed to satisfy the minimum requirements for site-specific remedial programs conducted under such programs. It also contains the minimum technical activities NYSDEC will generally accept for projects where DER oversight, approval or acceptance is sought or required. Ultimately, DER-10 assists a user in developing and implementing investigation and remediation projects under the programs administered by DER.

²¹ American Society of Testing and Materials. ASTM E1903-11. Available at: https://www.astm.org/DATABASE.CART/HISTORICAL/E1903-11.htm. Accessed September 2021.

3.2.1.4 The Brownfield Cleanup Program

The goal of the New York State Brownfield Cleanup Program (BCP) is to encourage privatesector cleanups of brownfields and to promote their redevelopment as a means to revitalize economically blighted communities.²²

To be incorporated into the BCP, an application must be submitted to, and accepted as complete by, the NYSDEC. Thereafter, public notices must be prepared and distributed to appropriate recipients, which may include, but not be limited to, federal, State, County and Town elected officials, the Nassau County Department of Health (NCDH), the Nassau County Department of Public Works (NCDPW), local community service providers, media outlets, and adjacent property owners. Following the distribution of the aforementioned public notices, a public comment period must be opened and maintained.

If the BCP application is approved by the NYSDEC, a Brownfield Cleanup Agreement (BCA) must be prepared. The BCA defines the extent of remedial actions to be undertaken by the Applicant, which must be performed under the oversight of the NYSDEC and in accordance with an approved Remedial Action Work Plan (RAWP). Once remedial actions have been satisfactorily completed, as determined by the NYSDEC, a Certificate of Completion is issued by the NYSDEC. Public involvement is maintained throughout the entire process.

3.2.2 Existing Conditions

3.2.2.1 2020 Phase I Environmental Site Assessment

In June 2020, VHB completed a Phase I ESA to determine recognized environmental conditions (RECs) (including historic [HRECs], controlled [CRECs], and/or business [BERs] conditions) present at the Subject Property (**Appendix E**). The Phase I ESA consists of the following components: records review (physical setting and document review, regulatory database review, local municipal agency records research and historic use records search); site reconnaissance; interviews with past and present owners and occupants; and evaluation and reporting.

Based on a review of historical documents and aerial photographs (**Appendix E**), VHB was able to establish a history²³ for the Subject Property dating back to 1936, at which time the Subject Property was developed as a sand and gravel company. The Subject Property was improved with wooden piers with barges containing sand and/or gravel, as well as a commercial building structure. By 1947, the southernmost wooden pier was demolished and dry-docks were constructed. By 1962, two masonry buildings, as well as the present-day office/storage building, were constructed on the Subject Property. In addition, a new pier/marina was constructed on the southeastern portion of the Subject Property and the northeastern pier was filled in with concrete. By 1980, the existing masonry storage building was improved on the northeastern portion of the Subject Property. By 2006, the wooden piers had been abandoned, as had the two former masonry buildings. In addition,

²² New York State Department of Environmental Conservation. *Brownfield Cleanup Program*. Available at: https://www.dec.ny.gov/chemical/8450.html. Accessed July 2021.

²³ The 2020 Limited Phase II ESA performed by PWGC, see further below, indicates that the Subject Property was identified in 1936 as Metropolitan Sand & Gravel Corp (Shipyard) with the piers still present. By 1961 one of the buildings on the site was identified as a steel fabrication shop.

construction and demolition (C&D) stockpiles were established on the northern-central and southwestern portions of the Subject Property. Furthermore, the present-day shed and storage trailers were established on the western portion of the Subject Property.

In addition to the above, the historic aerial photographs (**Appendix E**) indicate that the Subject Property had previously contained several commercial structures prior to 2006. As such, the Phase I ESA noted that there is a potential for previous building footings and materials to be buried subgrade, which are considered a BER.

The regulatory agency database search found the following (see **Appendix E** for additional detail):

- > The Subject Property is not listed on any of the 20 federal databases reviewed.
- An additional 21 federal databases reviewed found that the Subject Property is identified on the FINDS and Enforcement and Compliance History Online (ECHO) databases under "Bay Aggregates New York" based upon its inclusion on the ICIS- United States National Pollutant Discharge Elimination System (NPDES) module. The ICIS-NPDES module tracks surface water permits associated with the Clean Water Act (CWA). According to the EDR database report and the Detailed Facility Report (FRS ID: 110070625574), the Subject Property is designated as a minor unpermitted facility. As such, the identification on the FINDS and ECHO databases are unlikely to represent a significant environmental risk to the Subject Property.
- There is one National Priorities List (NPL) site (former "Port Washington Landfill"), one CERCLA Consent Decrees (CONSENT) site and one Record of Decision (ROD) site within one mile of the Subject Property; and one Superfund Enterprise Management System (SEMS) site and one Engineering Control Sites List (USEC) site within one-half mile of the Subject Property. These listings involve the former landfill, which according to the Phase I ESA, is not considered a significant environmental risk to the Subject Property.
- > The Subject Property is not listed on the 20 New York State databases reviewed.
- There is one delisted state hazardous waste site (DEL SHWS) site within one mile; four solid waste facilities/landfill (SWF/LF) sites, one solid waste disposal sites and registered recycling facility (SWRCY) site and two leaking storage tanks (LTANKS) sites within onehalf mile; and one chemical bulk storage facility within one-quarter mile of the overall Subject Property.

The Subject Property was inspected by VHB on May 29, 2020. At the time of site reconnaissance, VHB noted the presence of various hazardous materials (**Figure 3-4** and **Figure 3-5**). The existing office/storage building contained various maintenance products (cleaning supplies, painting supplies, etc.) and gasoline cans. The existing masonry storage building contained several 55-gallon drums containing engine oil and hydraulic oil, as well as several gasoline cans. The presence of several compressed gas cylinders was also documented. At the time of the visit, the gasoline cans and storage drums were noted to be in good condition, with no evidence of spills or leaks. VHB noted that the gasoline cans, storage drums, and compressed gas cylinders should be removed prior to the demolition of the buildings.

Figure 3-4: Phase I ESA Site Features (North)



West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Figure 3-5: Phase I ESA Site Features (South)

West Shore Residences



145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



VHB also noted the presence of three portable 110±-gallon diesel above ground storage tanks (ASTs); same were noted to be in good condition with no evidence of leaking or spills. Evidence of underground storage tanks (USTs) was not observed. Further, no evidence of hazardous materials handling, storage and/or disposal was observed within the exterior areas of the Subject Property during the May 29, 2020 visual inspection.

Additional details regarding the May 29, 2020 site inspection are provided in Appendix E.

Based upon the results of the site inspection and records review, VHB determined that there is one REC associated with the Subject Property, noting that:

Stockpiles of soils and C&D materials were observed on the northern-central and southern portions of the Subject Property. Additional soil stockpiles are present on the central portion of the Subject Property. Given the unknown quality of the stockpiles, soil samples should be collected in accordance with NYSDEC regulations prior to off-site disposal.

In addition, VHB determined there were several BERs associated with the Subject Property, as follows:

- > Three portable 110±-gallon diesel ASTs are present on the Subject Property, to the southwest of the existing office/storage building.
- > The Subject Property had previously consisted of several commercial buildings, which have since been demolished. There is a potential for previous building footings and materials to be buried subgrade.
- Given the close proximity of the Subject Property to NYSDEC-regulated wetlands, NYSDEC Tidal Wetlands, freshwater wetlands and federal wetlands, permitting and/or consultations may be required.
- According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the Subject Property is located within the 100-year flood zone. As such, there is a risk of flooding at the Subject Property.
- Based on the age of the existing masonry storage building and the existing office/storage building (i.e., constructed circa 1958), there is a potential for lead-based paint (LBP) to be present within these structures.
- Based upon the age of the existing masonry storage building and the existing office/storage building (i.e., constructed circa 1958), there is a potential for asbestos containing materials (ACM) to be present within these structures. ACM is subject to federal disposal restrictions and should be dealt with as part of standard demolition and/or renovation practices in accordance with applicable regulations.
- Based upon the age of the existing masonry storage building and the existing office/storage building (i.e., constructed circa 1958), there is a potential for polychlorinated biphenyls (PCBs) to be present in building materials. PCBs are subject to federal disposal restrictions and should be dealt with as part of standard demolition and/or renovation practices in accordance with applicable regulations.
- > The northwestern portion of the Subject Property consists of a vehicle storage area containing numerous vehicles, boats, forklifts, payloaders, and other machinery. Based upon the longevity of storage of the aforementioned vehicles and machinery, there is a potential for the release of fuel and/or hydraulic fluid. Surficial staining was not observed

within accessible areas of the vehicle storage area. However, the potential for a release represents a BER for the Subject Property.

> The on-site stockpiles of mulch have the potential to produce a runoff of manganese into Hempstead Harbor. Same represents a BER for the Subject Property.

3.2.2.2 2020 Limited Phase II Environmental Site Assessment

In December 2020, PWGC completed a Limited Phase II ESA to further evaluate potential impacts associated with the REC identified in VHB's Phase I ESA (i.e., the C&D stockpiles), as described above. In addition, based on PWGC's prior knowledge of the Subject Property, the following additional RECs, aside from the C&D stockpiles, were identified (**Figure 3-6**):

- > A suspected abandoned floor-drain and sump/pit were identified in the steel fabrication building. These structures present a potential conduit for contamination to migrate to the subsurface. Potential illicit discharges to the subsurface represent a REC.
- > Three suspected USTs were noted within the Subject Property. These USTs can act as a source for surface or subsurface spills to have occurred, which could have impacted site soils and groundwater, representing a REC.
- > A fueling truck, as well as several abandoned vehicles, were identified on the Subject Property. There was evidence of staining in the unpaved vicinity of these vehicles, indicating leaks may have occurred, which represents a REC.
- > Historical dumping, including washing machines and other types of debris, was reported to have occurred on the northern portion of the Subject Property, which PWGC believes is a REC.

The Limited Phase II ESA, which is appended in its entirety in Appendix F, included:

- > A geophysical survey: conducted on November 10, 2020, and with assistance from Delta Geophysics, Inc., this survey involved an electromagnetic survey and a ground penetrating radar (GPR) survey. The geophysical survey was conducted to determine the presence/absence of subsurface anomalies and evaluate disturbed soils located in the northern portion of the Subject Property, within the vicinity of the previously reported improper dumping, as noted above.
- A soil quality evaluation: based on the results of the geophysical survey, as well as the information provided in the Phase I ESA, PWGC, with assistance from Coastal Environmental Solutions, Inc., installed soil borings in areas of potential concern to characterize soil quality. A total of ten subsurface soil borings and four surface soil borings were installed by PWGC and Coastal Environmental Solutions, Inc. during this effort. Soil samples were collected from the 14 boring locations and generally analyzed for one or more of the following: Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Resource Conservation and Recovery Act (RCRA) Metals, and Organochlorine Pesticides using USEPA methods. Soil samples were also sent to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for further testing.
- A groundwater quality evaluation: following the completion of the soil borings, three temporary groundwater sample collection points were installed in areas of suspected USTs. Groundwater samples were collected from each of the three collection points and tested for VOCs and SVOCs using USEPA methods.

Figure 3-6: Phase II ESA Site Plan

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York





The Limited Phase II ESA provides an in-depth description of the results of these investigations described above (**Appendix F**).

Based on the results of the investigations described above, PWGC's Limited Phase II ESA offered the following conclusions:

- > The historical usage and current usage of the site as a ship maintenance yard and steel fabrication shop, in conjunction with the potential presence of a former onsite sanitary system, floor drains, abandoned vehicles, and reported improper dumping, represented a REC in the Phase I ESA. To address this concern, PWGC conducted a geophysical survey and installed soil borings. One subsurface anomaly, suspected to be reinforced concrete, was identified in the geophysical survey in the vicinity of the reported improper dumping and abandoned vehicle area. Two suspected former sumps/pits and one sealed floor drain were observed in the steel fabrication shop. No piping was observed to or from the structures and a solid bottom was inconclusive based on the field investigation. Minimal visual impact appeared to be present in the soil samples collected from these areas. Surface soil samples exhibited evidence of contamination consisting of lead, mercury and selenium. No results were in exceedance of Restricted-Residential Soil Cleanup Objectives (RRUSCOs) in these samples.
- > The surficial staining around the site and in the vicinity of ASTs and the suspected presence of three USTs at the Subject Property represented RECs. To address this concern, PWGC performed a geophysical survey and installed soil borings. Two suspected USTs appeared to be former tank pedestals for former ASTs located on the northern portion of the Subject Property based on field observations. The geophysical identified a previously unknown suspected 550-gallon UST west of the office building. Two of the four soil samples exhibited evidence of contamination consisting of petroleum related compounds. One compound, 1,2,4-Trimethylbenzne, was in exceedance of RRUSCOs. One groundwater sample exhibited evidence of contamination consisting of petroleum related compounds and two exhibited evidence of historic fill with analytical results in exceedance of Ambient Water Quality Standards (AWQS).
- The C&D stockpiles identified in the Phase I ESA represented a REC. It was understood that the stockpiles were pending removal; therefore, to address this REC, soil borings were installed around the stockpiles. Two of the three debris stockpiles identified in the Phase I ESA were observed. Minimal visual impact appeared to be present in the soil samples collected from these areas. One VOC and several pesticides were detected at concentrations exceeding their respective Unrestricted Use Soil Cleanup Objectives (UUSCOs). One compound, Ineno (1,2,3-cd) pyrene, was detected above RRUSCO.

In light of these conclusions, PWGC stated that "based upon the concentrations detected, further action is recommended to remediate areas where petroleum related contamination in soils and groundwater was documented." As detailed in Tables 2 and 3 of the Limited Phase II ESA (**Appendix F**), evidence of contamination consisting of petroleum-related compounds was documented in surface soil boring location SS-4 and soil boring location SB-10. As detailed in Tables 4 and 5 of the Limited Phase II ESA, evidence of contamination consisting of petroleum related compounds was also documented in groundwater sampling location G-3, which was taken from soil boring location SB-10. Thus, according to the recommendation of the Limited Phase II ESA, remediation is needed in the vicinity of surface soil boring location SS-4 and soil boring surface SOI boring location SB-10.

3.2.2.3 2022 Supplemental Phase II Environmental Site Assessment

In June 2022, PWGC prepared a Supplemental Phase II ESA, the purpose of which was to further evaluate RECs identified in a Phase I ESA report prepared by VHB in 2020 and address data gaps from PWGC's Limited Phase II ESA prepared in 2020 to obtain sound, scientifically valid data concerning actual property conditions.

To reiterate, the findings of PWGC's Limited Phase II ESA included the following:

- > The geophysical survey identified one suspected 550-gallon UST as well as several anomalies indicative of reinforced concrete slabs.
- > Surface soil samples from the former shipyard and steel fabrication shop areas exhibited evidence of contamination consisting of lead, mercury, and selenium.
- > Soil and groundwater samples collected from the vicinity of the suspected UST location contained petroleum related impact above NYSDEC standards.
- > VOC, SVOC and pesticide impacts were identified in soils in the vicinity of C&D stockpiles that were present in 2020.

Based on these findings, PWGC recommended further action to remediate areas where petroleum-related contamination in soils and groundwater was documented.

The scope of the Supplemental Phase II ESA was limited to Soil Quality Evaluation. Soils borings were conducted in areas of potential concern that were not included in the original scope of the Limited Phase II ESA. The areas for the boring locations included: suspected tank/vault locations; former location of C&D stockpiles; former AST location; suspected UST location; steel fabrication shop; near the former ship maintenance areas; and at the fill material beneath the pier. Eight borings and two surface soil sampling locations were installed (**Figure 3-6**).

Offshore sampling was also conducted at the following locations: adjacent to the sunken boat on the north side of the pier; adjacent to metal cribbing on the south side of the pier and near the center of the site; adjacent to wooden pilings near the center of the site; and adjacent to the sunken barge on the north side of the pier. Sampling protocols are detailed in the Supplemental Phase II ESA in **Appendix F** of the DEIS. The samples were analyzed for VOCs, SVOCs TAL Metals, Organochlorine Pesticides and PCBs. The offshore soil samples and certain surface soil samples were analyzed for SVOCs and TAL Metals.

Based on the soil borings and surface samples, multiple petroleum-related VOCs were detected at concentrations greater than their respective Unrestricted Use Soil Cleanup Objectives (UUSCOs) in certain locations. VOC concentrations did not exceed their respective Restricted-Residential Soil Cleanup Objectives (RRSCOs) in this sample with the exception of 1,2,4-trimethylbenzene. Several SVOCs, consisting of polycyclic aromatic hydrocarbons (PAHs) that are common in historical fill material, were detected at concentrations exceeding their respective UUSCOs and/or RRSCOs in the sample collected in the vicinity of a suspected utility vault/tank. No additional SVOCs were detected at concentrations exceeding their respective UUSCOs in soil samples collected from the site. Additionally, metals were detected at a number of locations exceeding their respective UUSCOs. Details of the specific metals are contained in the Supplemental Phase II ESA in **Appendix F**. The report notes that the metals impact detected in these samples may be related to the historical operations of

the site as a shipyard or may be attributable to the presence of historic fill material in various locations across the site (including beneath the concrete pier).

Pesticides were detected at concentrations were detected at concentrations exceeding their respective UUSCOs at several locations, but they did not exceed their respective RRSCOs. PCBs were not detected at concentrations exceeding their respective UUSCOs in soil samples collected from the site.

For the offshore sampling sites, chrysene was detected at one location at a concentration exceeding its UUSCOs but below its RRSCO. No additional SVOCs were detected at concentrations exceeding their respective UUSCOs in offshore soil samples collected from the site. Metals were detected at several of the offshore locations, as detailed in the Supplemental Phase II ESA. As with the soil boring locations, metals impact detected in these samples may be related to the historical operations of the site as a shipyard.

Based on the findings from the sampling, PWGC offered the following recommendations:

- The suspected UST near the central portion of the site should be properly closed and removed. Based on petroleum impact detected during PWGC's 2020 Limited Phase II ESA and the Supplemental Phase II ESA, it appears that petroleum impacted soil and groundwater is present in the vicinity of this suspected UST. Such impact should be addressed during removal of the tank in accordance with NYSDEC procedures.
- SVOCs, pesticides and metals in excess of UUSCOs were detected in soil samples collected from the onshore portion of the site. Metals in excess of UUSCOs were detected in soil samples collected from the offshore portions of the site. As future plans for the site consist of redeveloping the property, including construction of a residential building and marina, PWGC recommends that a Soil and Materials Management Plan (SMMP) be prepared to properly manage impacted soils in accordance with applicable federal, state, and local regulations.

3.2.2.4 Ongoing Remediation Activities

As noted in both the Phase I ESA and Limited Phase II ESA, the C&D stockpiles represent RECs that warrant removal from the Subject Property. At the time of its writing, the Limited Phase II ESA noted that the removal of the C&D stockpiles was pending. Since then, an Order on Consent was agreed upon between the current property owner and the NYSDEC. In accordance with same, the current property owner removed the C&D stockpiles from the Subject Property in conformance with the prevailing regulations; the current property owner provided NYSDEC with documentation detailing the completion of the removal activities and is awaiting termination of the Order on Consent.

Based upon information provided by PWGC and the Applicant, no other remediation activities have previously been completed or are currently being undertaken.

3.2.3 Potential Impacts

In accordance with the recommendations of the Phase I ESA and Limited Phase II ESA, and Supplemental Phase II ESA, implementation of the Proposed Action would require the completion of various remediation activities, as described below. The Phase I ESA noted the presence of various hazardous materials throughout the Subject Property, which specifically included:

- > Maintenance products (cleaning supplies, painting supplies)
- > Gasoline cans
- > 55-gallon storage drums containing engine oil and hydraulic oil
- > Compressed gas cylinders.

At the time of its writing, the Phase I ESA noted that the various containers described above appeared to be in good condition, with no evidence of spills or leaks. Still, the Phase I ESA indicated that the hazardous materials listed above should be removed from the Subject Property prior to the demolition of the existing structures. As such, prior to the implementation of the Proposed Action, these materials would be removed from the Subject Property and disposed of in conformance with prevailing regulations.

In addition, the Limited Phase II ESA recommended that further actions be taken to remediate areas affected by petroleum-related contamination. As such, remediation activities would be needed within the vicinity of surface soil boring location SS-4 and soil boring location SB-10 (**Figure 3-2**). According to PWGC, it is also anticipated that there is a UST (i.e., the previously unknown suspected 550-gallon UST west of the office building) that would have to be removed prior to implementation of the Proposed Action.

Furthermore, as indicated in the 2022 Supplemental Phase II ESA, the petroleum-impacted soil and groundwater that is present in the vicinity of this suspected UST is proposed to be addressed during removal of the tank in accordance with NYSDEC procedures. Additionally, due to the presence of metals in excess of UUSCOs, a SMMP is proposed to be prepared to properly manage impacted soils in accordance with applicable federal, state, and local regulations.

New York State Brownfield Cleanup Program

In association with the undertaking of the remediation activities described above, the Applicant will apply to the NYSDEC for the Subject Property to be entered into the New York State BCP. By entering the BCP, remediation activities would be undertaken under the oversight of the NYSDEC, and the NYSDEC would ensure that the redevelopment of the Subject Property is undertaken in a manner that would not result in an adverse risk to human health or the environment. Further, entering the BCP would guarantee transparency by requiring that the public be informed of, and invited to comment on, each step of the proposed remediation activities.

Under the BCP, the following steps would be taken to ensure remediation of the Subject Property in a manner that is protective of human health and the environment. As noted in **Section 3.2.1**, the Applicant would submit an application for inclusion into the BCP to the NYSDEC for review and to be deemed complete. As part of this application, the Applicant will document the known history of the Subject Property. Thereafter, as required by the terms of the BCP, public notice of the application would be disseminated using a variety of methods. The NYSDEC must approve a Site Contact List identifying those organizations that are required to be notified. It is anticipated that the approved Site Contact List would include, but would not be limited to federal, State, County and Town elected officials in the area of the Proposed Project, the NCDH, NCDPW, local community service providers, media outlets, and adjacent property owners. It is also anticipated that a copy of the BCP application would be maintained at a local repository (i.e., a local library) and would be published online and/or in a local newspaper. Following the distribution of the public notices, a public comment period would be opened and maintained for at least the minimum amount of time required under the terms of the BCP.

At the time the BCP application is accepted by the NYSDEC, the Applicant will sign a BCA, which would demonstrate the Applicant's commitment to undertaking remedial activities under the NYSDEC's oversight. It is anticipated that the Applicant would participate in the BCP as a Volunteer, indicating the Applicant is not liable for disposal of hazardous waste or discharge of petroleum at the site. A site-specific Remedial Investigation Work Plan, based upon the history of the Subject Property and general best practices for the characterization of the Subject Property, would be prepared. According to the requirements of the NYSDEC,²⁴ the remedial actions to be undertaken would be determined

...based on the characterization and extent of contamination on the site and qualitative exposure assessment...[a] Volunteer in the Brownfield Cleanup Program must evaluate and implement an effective remedy to address the contamination on-site as well as prevent further migration of contamination to off-site properties.

Furthermore, the proposed remedial actions would be determined, in part, by a Remedial Alternatives Analysis Report, which

...identifies one or more remedial alternatives and evaluates the effectiveness of each alternative with respect to the remedy selection evaluation criteria...remedies in the BCP are selected from four cleanup tracks...Once a remedy has been proposed, a fact sheet will be issued noticing the availability of the Remedial Work Plan (Remedial Alternatives Analysis or Remedial Action Work Plan) and presenting the proposed remedy for a 45-day public comment period.

DEC will consider the public comments for final remedy selection, have the applicant revise the plan as necessary, and issue a final Decision Document which describes the selected remedy. The applicant(s) may then design and perform the cleanup action to address the site contamination, with oversight by DEC and the NYS Department of Health.

The Applicant anticipates that in-water remediation activities would also be undertaken as part of the site cleanup efforts, including removal of the existing in-water structures outlined in **Section 2.4** of this DEIS. Upon completion of the remedial activities set forth by the Remedial Work Plan under the BCP project, and upon a determination by the NYSDEC that remedial action objectives for the BCP site have been achieved, the NYSDEC would issue a Certificate of Completion. According to the NYSDEC,

[a] Certificate of Completion allows the Applicant to receive a limitation of liability to the State of New York which applies to contamination identified by the remedial program.

²⁴ New York State Department of Environmental Conservation. Brownfield Cleanup Program. Available at: https://www.dec.ny.gov/chemical/8450.html. Accessed July 2021.

In addition, a Certificate of Completion makes the Applicant eligible to apply for BCP tax credits. The tax credits for individual sites may vary depending on when the site was accepted into the BCP.

To receive a Certificate of Completion, a BCA must have met a number of additional standards, which include, but are not limited to, the following:

- Preparation and execution of a Citizen Participation Plan (which will require opportunities for citizen involvement and will encourage consultation with the public early in the process)
- > Development of a Work Plan(s) (e.g., Remedial Investigation Work Plan, Remedial Work Plan, Interim Remedial Measure Work Plan, Site Management Plan [if the Work Plan provides for the identification and implementation of institutional and/or engineering controls, as well as any necessary monitoring and/or operation and maintenance of the remedy], and Supplemental Plan [if required])
- > Performance and Reporting of Work Plan(s)
- > Submission of Progress Reports.

Based on the preliminary information available (i.e., the results of the Phase I ESA, Limited Phase II ESA and Supplemental Phase II ESA), there may be several different remedial options that could be utilized; these options would be evaluated based upon the results of the Remedial Investigation Work Plan, as well as the ability of the different remedial options to reduce or eliminate potential exposure pathways. Ultimately, the specific remediation activities to be undertaken would be determined under the BCP through the various processes described above.

Public Safety

Various requirements of the BCP program would ensure necessary public safety measures are implemented. As noted above, inclusion in the BCP requires the implementation of a Citizen Participation Plan (CPP). The CPP would be prepared at the beginning of the BCP process and would be updated, as necessary, as remediation activities progress. The CPP would provide the local community with a summary of the Subject Property's history, the investigation process, and the cleanup process. At certain remediation milestones, public notices would be disseminated to those on the NYSDEC-approved Site Contact List to provide status updates and updated information. Through the CPP, the community would be made aware of any important project updates and would be notified, if necessary, of any potential public safety hazards.

The Proposed Action would also involve the development and implementation of a Community Air Monitoring Plan (CAMP). This document would detail the procedures for monitoring dust and organic vapor levels, as well as measures for preventing the off-site migration of same. In addition, the CAMP would establish appropriate dust and odor action levels that, if met or exceeded during investigation or remediation activities, would trigger the implementation of pre-determined mitigation measures. The CAMP would be prepared in accordance with the relevant requirements of both the NYSDEC and NYSDOH; dust and odor readings would be recorded continuously and regularly reported to these agencies for their review.

In addition, the RAWP would specifically highlight public safety measures to be implemented during investigation and remediation activities. Such measures would be anticipated to include, but not be limited to, the following:

- > The installation of construction fencing to prevent off-site personnel from entering the site
- > The use of on-site security personnel outside of normal working hours (potential)
- > The installation of a truck wash station to reduce off-site soil transport, as well as other erosion and sediment control measures.

As demonstrated above, the Proposed Action would employ various measures designed to promote public health and safety and minimize, to the greatest extent feasible, the potential for adverse public health and safety impacts.

Overall, through the oversight and strict procedures of the BCP, the Applicant would ensure that the redevelopment of the Subject Property would be undertaken in a manner that would not result in an adverse risk to human health or the environment.

Should the Applicant's application for inclusion in the BCP be denied by the NYSDEC, the Applicant would undertake the necessary remediation activities to ensure public safety of the future occupants of the Subject Property. Specifically, removal of the identified storage tanks would be undertaken under the oversight of the NCDH and the NYSDEC. The Applicant would submit a workplan for NCDH and NYSDEC approval. If, during the course of remediation activities, a leak from the tanks is discovered, the Applicant would submit a spill incident report to NYSDEC. All remediation activities would be undertaken in accordance with the approved workplan. Endpoint sampling would be conducted in accordance with NYSDEC's DER-10 sampling frequency guidance to ensure a successful remediation has been accomplished, which will be documented and submitted to the NCDH and NYSDEC. Any additional required remediation would be done so in coordination with these two oversight agencies until NCDH and NYSDEC provide regulatory sign-off for the tank closure.

3.2.4 Proposed Mitigation

Through the inclusion in the BCP, all investigation and remediation activities would be performed under NYSDEC's oversight. As part of the BCP process, a site-specific RAWP would be prepared. Same would include, among other things, mitigation measures designed to remove the various RECs located on the Subject Property and preclude adverse risks to human health or the environment, including, but not limited to:

- > The establishment of a CPP, which would inform the community of any important project updates and notify, if necessary, of any potential public safety hazards.
- > The establishment of soil cleanup objectives that, once achieved, would improve the quality of subsurface conditions.
- > The establishment of a CAMP, which would detail the proposed dust and soil vapor monitoring and management protocols.
- > The installation of construction fencing to prevent off-site personnel from entering the site.
- > The use of on-site security personnel outside of normal working hours (potential).

> The installation of a truck wash station to reduce off-site soil transport, as well as other erosion and sediment control measures.

Should the Subject Property not be accepted into the BCP, the Applicant would undertake remediation activities under the oversight of the NCDH and NYSDEC. Overall, the Proposed Action would incorporate mitigation measures that would minimize, to the greatest extent feasible, the potential for adverse impacts associated with the remediation of the Subject Property.

3.3 Water Resources

3.3.1 Regulatory Framework

The following State and Town regulations are relevant to the Subject Property's water resources.

3.3.1.1 State Pollutant Discharge Elimination System—General Permit for Stormwater Discharges from Construction Activity

As described in **Section 3.1.1**, construction activities disturbing one or more acres of soil must obtain a General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001) from the New York State Department of Environmental Conservation (NYSDEC).²⁵ Pursuant to GP-0-20-001, a Stormwater Pollution Prevention Plan (SWPPP)²⁶ must be developed and submitted to the NYSDEC, as well as the local authority (i.e., the Town of North Hempstead), prior to the commencement of construction activities. The SWPPP must demonstrate compliance with the requirements of the NYSDEC, as well as the requirements of the local authority (see below).

3.3.1.2 Town of North Hempstead—Stormwater Management and Sediment and Erosion Control

As described in **Section 3.1.1**, the Town of North Hempstead's SWPPP requirements are enumerated in Chapter 46A of the Town Code. Chapter 46A identifies specific design components (i.e., erosion and sediment control measures) and technical standards that a proposed SWPPP must satisfy. In addition, this chapter of the Code details maintenance and inspection requirements that must be followed through the completion of construction. A proposed SWPPP must be reviewed and accepted by the Town's Stormwater Management Officer to ensure compliance with the above.

3.3.1.3 Town of North Hempstead—Floodplain Management Regulations

Chapter 21 of the Town Code was set forth to minimize the threat of damages associated with flooding and erosion. To do so, this chapter establishes floodplain development standards designed to protect against flood damage, to the greatest extent feasible. Areas

²⁵ New York State Department of Environmental Conservation. SPDES General Permit for Stormwater Discharges from Construction Activity. Permit No. GP-0-20-001. Available at: https://www.dec.ny.gov/docs/water_pdf/constgp020001.pdf. Accessed July 2021.

²⁶ A SWPPP is a construction management document that includes a detailed erosion and sediment control plan to manage stormwater generated on-site during construction activities.

located within a Special Flood Hazard Area (SFHA), as determined by FEMA's FIRM, are subject to the provisions of Chapter 21.

3.3.1.4 New York State Community Risk and Resiliency Act

In September 2014, New York State took a vital step in ensuring that state legislators, agencies, and coastal communities had tools available to assess the coastline's vulnerability and exposure to sea level rise and climate change through the Community Risk and Resiliency Act (CRRA).²⁷ The purpose of CRRA is to ensure that certain state monies, facility-siting regulations, and permits include consideration of the effects of climate risk and extreme-weather events.²⁸ This legislation provided tools that serve as key guidance for state agencies and coastal communities to address their exposure and risk to sea level rise and climate change. In consideration of the existing regulations, and funding programs, these tools help assess the potential impacts of sea level rise and climate change.

3.3.1.5 Harbor Management Plan for Hempstead Harbor

The Harbor Management Plan for Hempstead Harbor (Cashin Associates, August 2004) was prepared to provide a framework for identifying key issues regarding Hempstead Harbor and formulating recommendations and goals to address those issues. The guiding principle of this plan is to provide a mechanism for the various municipalities that share Hempstead Harbor to work together in an effort to address priority issues related to the wise use and protection of the harbor's surface water, natural resources, underwater lands, and shorefront.

It is noted that the goals described in this plan primarily pertain to the future development along Hempstead Harbor. As such, this plan is discussed in detail in **Section 3.5** of this DEIS.

3.3.1.6 Water Quality Improvement Plan for Hempstead Harbor

Based upon a comprehensive review of historical water quality data, pollutant loading contributions, development regulations, and development patterns, the *Water Quality Improvement Plan for Hempstead Harbor* (Coastal Environmental Services, May 1998) recommended a number of management and restoration measures aimed at the long-term maintenance of Hempstead Harbor's water quality. Recommendations and restoration measures were classified into one of three categories: public education initiatives, source control strategies, and delivery control strategies. It is noted that the majority of these recommendations and restoration measures pertained directly to municipalities (i.e., procedural and regulatory recommendations).

²⁷ New York State Department of Environmental Conservation. Community Risk and Resiliency Act (CRRA) Mainstreaming Consideration of Climate Change. Available at: https://www.dec.ny.gov/energy/102559.html. Accessed August 2021.

²⁸ New York State Assembly. Community Risk and Resiliency Act (CRRA) Statute. Available at: https://dos.ny.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_statute.pdf. Accessed August 2021.
3.3.2 Existing Conditions

3.3.2.1 Groundwater

Long Island is a sole source aquifer region, which means that groundwater is the only source of potable water available to meet the needs of the population.²⁹ Thus, land use has the potential to impact the quality of the water supply. A discussion of the specific water supply for the Subject Property (including potable and irrigation water) is included in **Section 3.7**, of this DEIS.

According to NYSDEC, "the aquifers underlying Long Island are among the most prolific in the country. Almost all of Long Island's drinking water is from groundwater with surface water an insignificant contributor...The three most important Long Island aquifers are the Upper Glacial Aquifer, the Lloyd Aquifer, and the Magothy Aquifer."³⁰

More specifically, according to NYSDEC:

- > The Upper Glacial Aquifer is an unconfined aquifer directly underlying the ground surface. The Upper Glacial aquifer was formed during the last ice age.
- > The Magothy is the largest of Long Island's aquifers. Consisting of sand deposits alternating with clay, it attains a maximum thickness of approximately 1,100 feet and is the source of water for most of Nassau County and about half of Suffolk County.
- > The Raritan Formation underlies the Magothy. Its two primary units are an upper clay member, and a lower sand member named the Lloyd Sand. The clay member separates the Magothy and Lloyd aquifers and serves as a confining unit for the underlying Lloyd Sand aquifer. The clay member has a maximum thickness of 300 feet.
- > The Lloyd Aquifer is the deepest and oldest of Long Island's aquifers. It is a sand and gravel formation ranging in thickness from zero to five hundred feet. At its deepest, it is 1,800 feet below the surface. The water contained in the Lloyd aquifer is about six thousand years old. Not many wells tap this formation and New York Environmental Conservation Law §15-1528 establishes a moratorium on the use of water from this formation in order to maintain it for future generations.³¹

Groundwater flow on Long Island is characterized by a groundwater divide, extending eastto-west along its length. To the north of the groundwater divide, which in the vicinity of Nassau County extends across roughly the center of the County (in the general vicinity between I-495 and Jericho Turnpike), horizontal groundwater flow is generally to the north; in areas south of the divide, groundwater flow is generally toward the south. Review of the USGS Water-Table and Potentiometric-Surface Altitudes in the Upper Glacial, Magothy, and Lloyd Aquifers beneath Long Island, New York, April-May 2016³² publication indicates that the Subject Property is north of the groundwater divide; regional groundwater flow direction

³¹ Ibid.

²⁹ United States Geological Survey. *Groundwater Suitability of the Long Island Aquifer System*. Available at: https://www.usgs.gov/centers/nywater/science/groundwater-sustainability-long-island-aquifer-system?qt-science_center_objects=0#qt-science_center_objects. Accessed August 2021

³⁰ New York State Department of Environmental Conservation. *Long Island Aquifers*. Available at: https://www.dec.ny.gov/lands/36183.html. Accessed August 2021.

³² United States Geological Survey. Water-table and potentiometric-surface altitudes in the upper glacial, Magothy, and Lloyd aquifers of Long Island, New York, April–May 2016. Available at: https://pubs.er.usgs.gov/publication/sim3398. Accessed August 2021.

beneath the Subject Property would therefore be expected to generally be to the north. However, the Phase I ESA prepared by VHB in June 2020 for the Subject Property (see **Appendix E**) indicates that groundwater flow is expected to flow to the east towards the adjoining Hempstead Harbor and is likely tidally influenced. Given the Phase I ESA's more site-specific analysis, groundwater flow beneath the Subject Property is generally expected to be towards the east.

The aforementioned USGS publication indicates that water table elevations in the vicinity of the Subject Property range from approximately 0-to-10 feet above mean sea level (amsl) (NAVD88). The depth to water table is greatest near the westernmost boundary of the Subject Property, adjacent to West Shore Road, and decreases moving towards its easternmost boundary. According to the site-specific Topographic Survey (**Appendix H**), elevations within the upland portions of the Subject Property range from 4-to-30 \pm feet amsl. As described in detail in **Section 3.1.2**, elevations are lowest near the easternmost portions of the upland areas and generally increase moving westward across the Subject Property. Accordingly, published data suggest that the depth to groundwater within the upland portions of the Subject Property are estimated to range from approximately 0-to-20 \pm feet below grade surface (bqs) (**Figure 3-7**).

Site-specific depth to groundwater data is available from the geotechnical investigations performed by PWGC. A full discussion of the results of the geotechnical investigations is included in **Section 3.1.2**, and the geotechnical report is included in its entirety in **Appendix G**. According to the site-specific geotechnical investigations, which involved eight soil borings across the Subject Property, depth to groundwater within the Subject Property ranges from 8-to-17± feet bgs. It was noted that depth to groundwater elevations were highest near the western side of the Subject Property, and PWGC indicated that these results may be indicative of a perched water condition caused by the underlying soils.

As part of its geotechnical investigation, PWGC also installed a groundwater monitoring well within the central portion of the Subject Property, to the southeast of the existing masonry storage building. A groundwater data logger measuring depth to groundwater was installed and left on-site for a period of 29 days. Groundwater measurements taken at the monitoring well indicated a depth to groundwater of between 10-feet-8±-inches and 11-feet-7±- inches± bgs. In addition, the data logger noted daily variations in depth to groundwater associated with tidal changes. Specifically, PWGC reported that during each 12-hour tidal cycle, the depth to groundwater fluctuated by approximately 1.5 feet.

Based on the results of its investigations, PWGC recommended that shallowest groundwater elevation be considered 4± feet amsl (NAVD88) for purposes of analysis. Factoring in a safety factor of one foot, PWGC recommended the design groundwater elevation for the Subject Property be considered 5± feet amsl (NAVD88). PWGC also noted that based off of projected sea level rise data, depth to groundwater may rise to 6-feet-9±-inches amsl (NAVD88) by the year 2050. A detailed discussion of future sea level rise projections is included in the sub-section entitled *Floodplains*, below.

Figure 3-7: Depth to Groundwater

West Shore Residences



145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Subject Property

Depth to Groundwater Contours

- 5-foot Contour
- 10-foot Contour

Source: NYS Ortho Imagery (2020); Water-table and Potentiometric-surface Altitudes in the Upper Glacial, Magothy, and Lloyd Aquifers of Long Island, New York, April-May 2016: USGS, 2018.

As described in the Nassau County Groundwater Monitoring Program Report (the Nassau County Groundwater Report) (discussed in detail below), depth to groundwater is dependent on a number of factors, including precipitation levels, recharge rates,³³ and groundwater withdrawal rates. According to the Nassau County Groundwater Report, precipitation rates in Nassau County are generally distributed evenly throughout the year. In comparison, recharge rates and withdrawal rates are variable and are generally seasonally dependent. As such, seasonal variations in depth to groundwater can be expected.

The *Nassau County Groundwater Report* indicates that recharge rates are greatest during the non-growing season (i.e., October to March), when evapotranspiration³⁴ is low. In comparison, recharge rates are lowest during the growing season (i.e., April to September), when evapotranspiration is significantly higher. Due to the increased water demands associated with irrigation, water withdrawal rates are generally highest during the growing season. Combined, the decreased recharge rates and increased water withdrawal rates results in lower groundwater levels during the growing season. Groundwater levels are therefore highest during the non-growing season.

The groundwater monitoring undertaken by PWGC was performed from November to December, during the non-growing season. Therefore, it is anticipated that the site-specific depth to groundwater levels discussed above are generally representative of the highest annual groundwater levels. On-site depth to groundwater levels are anticipated to be lower during the growing season.

Long Island Comprehensive Waste Treatment Management Plan (208 Study)

In 1978, Long Island was divided into eight hydrogeologic zones in the Long Island Comprehensive Waste Treatment Management Plan (the "208 Study"). According to the 208 Study (Page 45, Volume I), the Subject Property is located within Hydrogeologic Zone VIII— North Shore Shallow Flow System. Within Zone VIII, the Magothy formation has been completely eroded away and has been replaced by a deep glacial aquifer. Zone VIII is likely to contribute water only to the shallow groundwater flow system, which discharges to streams and saltwater bays and, therefore, affects the quality of surface waters. The 208 Study notes that Zone VIII discharges into North Shore bays, whose water quality is more dependent on the Long Island Sound. In the vicinity of the Subject Property, the receiving North Shore bay is Hempstead Harbor.

The 208 Study lists structural and non-structural recommendations, and from these recommendations defines the Highest Priority Areawide Alternatives to manage potential impacts to groundwater in each Hydrogeologic Zone. For Zone VIII, specific recommendations and alternatives are provided for each of the main receiving North Shore Bays. For Hempstead Harbor, the Highest Priority Areawide Alternatives are as follows:

- > Control stormwater runoff to minimize the transport of sediments, nutrients, metals, organic chemicals and bacteria to surface waters.
- > Encourage the relocation of solid waste handling operations and landfills, which are now sited within the coastal zone, to sites outside it.

³³ The rate at which water is added beneath the ground surface to replenish groundwater.

³⁴ The loss of water from soil, by both evaporation from the soil surface and transpiration from the laves of the plants growing thereon.

Nassau County Groundwater Monitoring Program Report

The Nassau County Groundwater Report (Nassau County Department of Public Works (NCDPW), 2005) presents a broad overall view of trends in the condition of Nassau County's groundwater resources. The NCDPW prepared this report to describe the County's comprehensive and long-standing groundwater program that has been in existence since the 1930s, and to present a summary of the data collected through the NCDPW's groundwater monitoring efforts.

According to the *Nassau County Groundwater Report*, raw groundwater quality throughout the County has improved, largely due to the installation of sanitary sewers serving over 90 percent of Nassau County's population. Moreover, regulatory programs governing the use, storage and disposal of hazardous substances has aided in the improvement of groundwater quality. The report anticipates that improvements in raw groundwater quality are expected to continue into the future.

The Nassau County Groundwater Report notes that annual public water demand has been increasing over the recent years due to large scale development, as well as increased warmer weather water usage (i.e., lawn irrigation). Despite the increase in water usage, the report notes that there is no threat of running out of available groundwater for water supply purposes, as recharge to the groundwater exceeds the amount of water withdrawn. However, lawn irrigation represents an issue that should be targeted to control future increases in annual water demand.

Nassau County Public Health Ordinance

Article X

Article X of the Nassau County Public Health Ordinance (NCPHO) is entitled "Groundwater Protection and Regulation of Sewage and Industrial Wastewater."³⁵ Its intent and purpose is to "preserve the quality of the aquifers receiving recharge from areas which have been designated as Special Groundwater Protection Areas (SGPAs)." In pursuit of this purpose, Article X sets forth certain requirements for projects located within an SGPA.

The Subject Property is not located within an SGPA (and, as such, is not located within the Town's Aquifer Protection Overlay District); therefore, the provisions of Article X of the NCPHO are not applicable.

Article XI

Article XI of the NCPHO, entitled "Toxic and Hazardous Materials Storage, Handling and Control," was prepared to "...safeguard the water resources of the County of Nassau from contamination by toxic and hazardous materials including petroleum products by preventing pollution from the more than 100 million gallons of toxic and hazardous materials currently being stored, transferred or used by various residential, commercial and industrial facilities. The discharge of these toxic and hazardous materials is caused by leaking tanks, improper storage, and handling, as well as accidental spills. The potential for these discharges would

³⁵ Nassau County Department of Health. Nassau County Public Health Ordinance. June 2014. Available at: https://nassaucountyny.gov/DocumentCenter/View/16417/Nassau-County-Public-Health-Ordinance--2014?bidId=. Accessed August 2021.

be effectively reduced by requiring that proper storage and handling are provided; that new tanks meet rigid standards; and that all tanks are routinely tested and inspected to ensure compliance."

Pursuant to Article XI, Section 7 (Exemptions), Item (a)(3), "All storage of toxic and hazardous materials in containers of five gallon capacity or smaller, where the total capacity stored at any time does not exceed 250 gallons or where the dry storage in bags, bulk or small containers does not exceed 2,000 pounds, is exempt from all provisions of this Article unless specifically ruled otherwise by the Commissioner on a case-by-case basis as inconsistent with the intent of this Article."

3.3.2.2 Stormwater

Stormwater runoff is rainwater or melted snow that flows over land, including pavement, roofs, lawns and other landscaping, and does not directly soak into the ground. As noted by the USGS, there are four potential paths of stormwater; some of the flow will be intercepted by vegetation and evaporate into the atmosphere; some will fall onto the ground surface and evaporate; some will infiltrate into the soil; and some will run directly off from the ground surface.³⁶ As described by the USEPA, "when stormwater is absorbed into soil, it is filtered and ultimately replenishes aquifers or flows into streams and rivers."³⁷

According to the Phase I ESA (Section 0), VHB did not note the presence of any at grade stormwater drains during its May 2020 visual inspection. It is therefore expected that stormwater runoff generated at the Subject Property infiltrates the ground through unpaved portions of the Subject Property and ultimately runs off to the east (i.e., into Hempstead Harbor).

The management of stormwater runoff has been extensively studied and regulated by State and local agencies, as further discussed below.

New York State Department of Environmental Conservation (NYSDEC) Standards

In the NYSDEC manual, *Reducing the Impacts of Stormwater Runoff From New Development*, the concept of stormwater management is such that there are quantitative controls, or a system of vegetative and structural measures, which can be used "to control increased volume and rate of surface runoff caused by man-made changes to the land" to convey stormwater flows and avoid flooding, and qualitative controls, that can also be used "to control or treat pollutants carried by surface runoff" (page 5). The goal of stormwater management is to prevent substantial alteration of the "quantity and quality of stormwater run-off from any specific development... from predevelopment conditions" (page 6).

As indicated in the *New York State (NYS) Stormwater Manual*,³⁸ stormwater management planning includes the calculation of the stormwater volume for a site, incorporating any

³⁶ United States Geological Survey. *Surface Runoff and the Water Cycle.* Available at: https://www.usgs.gov/special-topic/water-science-school/science/surface-runoff-and-water-cycle?qt-science_center_objects=0#qt-science_center_objects. Accessed August 2021.

³⁷ United States Environmental Protection Agency. EPA Facility Stormwater Management. Available at: https://www.epa.gov/greeningepa/epa-facility-stormwater-management. Accessed August 2021.

³⁸ New York State Department of Environmental Conservation (originally prepared by Center for Watershed Protection), New York State Stormwater Management Design Manual (Albany, NY: NYSDEC, 2015). Available at: http://www.dec.ny.gov/chemical/29072.html. Accessed August 2021.

runoff reduction features or techniques in place, and the use of standard stormwater management practices (SMPs) and control practices, as applicable given site-specific considerations. Acceptable SMPs for stormwater treatment can capture and treat the full stormwater volume and meet performance standards designed in the *NYS Stormwater Manual*, including the removal of pollutants before stormwater reaches groundwater or surface waters. Broad categories of acceptable practices include stormwater wetlands (shallow marsh areas, permanent pools, and/or extended detention storage areas), infiltration practices (capturing and temporarily storing stormwater before allowing it to infiltrate into the soil), filtering practices (capturing, temporarily storing stormwater and passing it through a filter bed of treatment media) and open channel practices (capturing and treating stormwater within designed dry or wet cells).

New York State Pollutant Discharge Elimination System (SPDES) Program

The USEPA Phase I Rule was issued in 1990 and regulates stormwater discharges associated with industrial activities. As defined at 40 CFR 122.26(b)(14), industrial activities include construction activities (e.g., clearing, grading and excavation) that result in the disturbance of five acres or more of land area. The Phase I Rule requires such activities to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for stormwater discharges (or coverage under an NPDES-approved State permit). The USEPA Phase II stormwater rule was implemented to regulate (among other things) construction activities disturbing less than five acres, but greater than one acre of land. NYSDEC administers New York's NPDES-approved SPDES program, which includes a General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001 - current version). This General Permit applies to the following construction activities when stormwater runoff may discharge to Waters of New York State (including Waters of the United States):

- Construction activities involving soil disturbances of one or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land.
- Construction activities involving soil disturbances of less than one acre where NYSDEC has determined that a SPDES permit is required for stormwater discharges based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to surface waters of the State.

Projects covered under the SPDES GP-0-20-001 General Permit (current version) are required to develop and implement a SWPPP that meets criteria set forth by NYSDEC. All SWPPPs must include practices consistent with the *New York Standards and Specifications for Erosion and Sediment Control* (2016 Blue Book).³⁹ Many construction sites must also comply with the *NYS Stormwater Manual* to address post-construction stormwater discharges.

In addition, the USEPA Phase II rule requires permits be obtained for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in New York State-designated urbanized areas. The Town of North Hempstead is a designated urbanized area with regulated MS4s.⁴⁰ The SPDES General Permit for Stormwater Discharge from MS4s (GP-0-15-

³⁹ New York State Department of Environmental Conservation. *New York State Standards and Specifications for Erosion and Sediment Control.* July 2016. Available at: http://www.dec.ny.gov/chemical/29066.html. Accessed August 2021.

⁴⁰ New York State Department of Environmental Conservation. *Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (MS4s)*, Revised May 2010. Available at: http://www.dec.ny.gov/docs/water_pdf/ms4gpdescrit.pdf. Accessed August 2021.

003) requires that permittees meet a variety of requirements that are generally designed to encourage municipalities and/or public agencies to actively seek to reduce the amount of contaminants that reach waters of the State through stormwater runoff, including:

- > To inventory and analyze stormwater runoff generated within the MS4 jurisdiction;
- > To engage in public education and outreach efforts that disseminate information on the sources of stormwater runoff, potential causes of contamination of stormwater runoff, and the impacts of same on surface water quality; and
- > To implement and enforce stormwater management regulations for land development activities within the MS4 jurisdiction that are at least as stringent as SPDES General Permit requirements.⁴¹

In accordance with the above-referenced requirements for MS4s, the Town of North Hempstead has set forth provisions pertaining to stormwater management in Chapter 46A, *Stormwater Management and Sediment and Erosion Control*, of the Town Code.

The purpose of Chapter 46A is to "establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction..."

The stormwater management objectives for the Town of North Hempstead are as follows:

- A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02 or as amended or revised;
- B. Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities GP-02-01 or as amended or revised;
- C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and streambank erosion and maintain the integrity of stream channels;
- D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality;
- *E.* Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and
- F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.

Land development activities are subject to the review and approval of a SWPPP that must be prepared in accordance with the provisions of Chapter 46A. The Proposed Action is also subject to NCDPW review pursuant to § 239-f of the New York Municipal Law, as the Proposed Action involves curb cut(s) on property fronting a county roadway (i.e., West Shore

⁴¹ New York State Department of Environmental Conservation. New York State Department of environmental Conservation SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), effective May 1, 2015. Available at: http://www.dec.ny.gov/docs/water_pdf/ms4permit.pdf. Accessed August 2021.

Road). See **Section 3.3.3** for a discussion of the Proposed Actions effect on on-site stormwater conditions and consistency with the Town and County stormwater requirements.

Town of North Hempstead Storm Water Management Program Plan

To further comply with MS4 permit requirements, the Town has also adopted a Storm Water Management Program (SWMP) Plan (the Town SWMP). This plan provides an overview of how the Town will implement each of the six minimum control measures (MCMs) required under the MS4 permit, which are:

- > Public Education and Outreach
- > Public Involvement and Participation
- > Illicit Discharge Detection and Elimination
- > Construction Site Storm Water Runoff Control
- > Post-Construction Storm Water Management
- > Pollution Prevention and Good Housekeeping for Municipal Operations

The Proposed Action's consistency with these MCMs, as applicable, is discussed in **Section 3.3.3**.

3.3.2.3 Floodplains

As depicted by the FEMA FIRM,⁴² Panel No. 36059C0108G, portions of the Subject Property are located within SFHA Zone AE and Zone VE, as well as Zone X (moderate flood hazard) (**Figure 3-8**).

Zone AE is subject to inundation by the 1-percent-annual-chance flood event (100-year flood); Zone VE is subject to inundation by the 1-percent-annual-chance flood event, as well as additional hazards due to storm-induced wave action;⁴³ Zone X (moderate flood hazard) is subject to inundation by the 0.2-percent-annual-chance flood event (500-year flood). Base Flood Elevations⁴⁴ (BFEs) are also designated for Zones AE and VE.

Within the Subject Property, the BFEs of Zones AE and VE range from 13 to 19 feet; BFEs generally decrease moving east to west within the Subject Property.

⁴² Federal Emergency Management Agency Flood Map Service Center. *FEMA Flood Insurance Rate Map*. Available at: https://msc.fema.gov/portal/search?AddressQuery=145%20West%20Shore%20Road%2C%20Port%20Washington%2C%20New%20York#s earchresultsanchor. Accessed August 2021.

⁴³ Federal Emergency Management Agency. *Glossary*. Available at: https://www.fema.gov/about/glossary. Accessed August 2021.

⁴⁴ According to FEMA, the base flood elevation is "the elevation of surface water resulting from a 1% chance of equaling or exceeding that level in any given year."

Figure 3-8: FEMA Floodplains

West Shore Residences



145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



500-Year Floodplain

A description of the specific flood zones areas and BFE designations within the Subject Property is provided below.

- > The easternmost portion of the Subject Property, seaward of the existing concrete platform, is located within Zone VE, with a BFE of 19 feet. This entire portion of the Subject Property is underwater.
- > The central portion of the site, extending from the existing concrete platform westward up to some of the upland portions of the Subject Property, is located within Zone VE, with a BFE of 16 feet.
- > The southwest corner of the Subject Property is located within Zone AE, with a BFE of 13 feet.
- > An area near the western boundary of the Subject Property, located southeast of the existing masonry storage building, is located within Zone X (moderate flood hazard).
- > The remainder of the Subject Property is within an area of minimal flood hazard (also designated as Zone X on the FIRM).

As depicted in **Figure 3-8**, the majority of the areas located within flood zones are underwater. However, some existing on-site improvements are within the flood zones, including the existing concrete platform, the existing concrete block building, existing concrete and timber bulkheads, and various storage and stockpile areas. The remainder of the areas within flood zones predominantly contain vegetated and beach areas.

According to FEMA, areas in Zones AE an VE are subject to mandatory flood insurance purchase requirements and floodplain management standards. These requirements do not apply to areas in Zone X.

The Town of North Hempstead has set forth provisions pertaining to flood hazard zones and flood damage protection in Chapter 21 of the Town Code, Floodplain Management Regulations. These provisions are based on the FEMA standards and are designed to:

- > Protect human life and health.
- > Minimize expenditure of public money for costly flood control projects.
- > Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- > Minimize prolonged business interruptions.
- > Minimize damage to public facilities and utilities, such as water and gas mains; electric, telephone and sewer lines; and streets and bridges, located in areas of special flood hazard.
- > Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to maintain future flood blight areas.
- > Provide the developers as notified that property is in an area of special flood hazard.
- > Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

A discussion of the Proposed Action's consistency with the relevant portions of Chapter 21 of the Town Code is provided in **Section 3.3.3** of this DEIS.

New York State Community Risk and Resiliency Act and New York State Sea Level Rise Projections

As described in **Section 3.3.1**, the CRRA was enacted to ensure that state legislators, agencies, and coastal communities had tools available to assess the coastline's vulnerability and exposure to sea level rise and climate change; these tools were set in place to assist various state permit programs, facility-siting regulations and permits. Most of the programs affected by CRRA already included some consideration of flooding prior to becoming legislation. These programs generally prohibit or apply additional requirements to projects located in SFHAs as indicated on FIRMs issued by FEMA. Although the adopted sea level rise projections discussed below do not establish new standards or criteria for issuing permits or issuing funding by NYSDEC, some NYSDEC programs now require applicants to show that future physical climate risk due to sea level rise, storm surge and flooding were considered when formulating the project. As a result, NYSDEC will consider these factors when siting facilities within areas at risk in coastal areas as part of enforcing the CRRA.

The CRRA outlines five major provisions for New York to address when considering a community's risk to sea level rise and exposure to storms: establishment of official sea level projections; consideration of sea level rise, storm surge and flooding; expansion of Smart Growth Public Infrastructure Policy Act (SGPIPA) criteria to address climate change and sea level rise; guidance on natural resiliency measures; and creation of models of local laws concerning climate risk.

In compliance with the CRRA requirement of establishing official science-based sea level rise projections, sea level rise projections through the year 2100 were established by New York State for the Long Island, New York City/Lower Hudson, and Mid-Hudson geographic regions of New York in 2017 (see 6 NYCRR Part 490, Projected Sea level Rise).⁴⁵ The projections for Long Island are provided below (**Table 3-5**); they describe expected increases above the 2000-2004 sea level rise baseline.

		Sea Level Rise (Inches)				
	Scenario	Low	Low- Medium	Medium	High- Medium	High
Time Interval	2020s	2	4	6	8	10
	2050s	8	11	16	21	30
	2080s	13	18	29	39	58
	2100	15	21	34	47	72

Table 3-5New York State Sea Level Rise Projection for Long Island, 6 NYCRRPart 490

The CRRA provides for collaboration among NYSDEC and New York State Department of State (NYSDOS) to establish model laws for consideration by local municipalities regarding

⁴⁵ New York State Department of Environmental Conservation. Community Risk and Resiliency Act (CRRA) Mainstreaming Consideration of Climate Change. Available at: https://www.dec.ny.gov/energy/102559.html. Accessed August 2021.

sea level rise and resiliency measures. As of the time of the writing of this DEIS, the Town of North Hempstead has not adopted specific regulations to address sea level rise.

To evaluate sea level rise projections as they relate to current conditions, National Oceanic and Atmospheric Administration (NOAA) tide gauges can be used to provide baseline conditions for comparison. To estimate local mean sea level trends, nearby "long-term"⁴⁶ NOAA tide gauges were identified.

The closest, long-term, NOAA tide gauge to the Subject Property is Sandy Hook, located approximately 32 miles away. According to the tide gauge data, the mean high water⁴⁷ at Sandy Hook is 2.65 feet (31.8± inches) amsl.⁴⁸

Based upon the baseline conditions at Sandy Hook, a discussion of the potential impacts of sea level rise on the Proposed Action is included in below. As part of the assessment, the useful life of the Proposed Project (i.e., the expected number of years for which the Proposed Building and various other components will be functional) is evaluated.

3.3.3 Potential Impacts

3.3.3.1 Groundwater

Potable and irrigation water would be supplied to the Proposed Building by the Port Washington Water District; the Proposed Building would not directly utilize groundwater beneath the Subject Property for any reason. Additionally, sanitary waste generated by the Proposed Building would be accommodated via connection to the Port Washington Water Pollution Control District, Nassau County or another local sewer district (as an out-of-district connection). Thus, there would be no on-site discharges of sanitary waste to groundwater. As a residential use, there would be no process water discharges, or similar wastes that could potentially be discharged to groundwater. Accordingly, the potential for the Proposed Action to result in significant adverse impacts to groundwater is substantially limited.

Excavation activities have the potential to reach groundwater, as published data and sitespecific subsurface investigations indicate shallow groundwater conditions throughout the Subject Property. Based on the shallow depth to groundwater, to mitigate against installation of building foundations and stormwater management structures reaching groundwater, said structures would be designed to meet or exceed the minimum separation distance above observed groundwater levels. The proposed stormwater management system (detailed below) includes the use of shallow concrete leaching galleys to allow for a more even distribution of stormwater recharge over a larger area as compared to conventional drywells. In addition, the proposed site design minimizes the installation of impervious surfaces through the use of pervious pavers and site landscaping to the maximum extent

⁴⁶ "Long-term" tidal gauges are those which have data records long enough to be used for trend analyses, typically considered to be over 30 years. National Oceanic and Atmospheric Administration. *Incorporating Sea Level Change Scenarios at the Local Level*. Available at: https://coast.noaa.gov/data/digitalcoast/pdf/slcscenarios.pdf. Accessed November 2019.

⁴⁷ The average of the highest of the two high water heights of each tidal day observed over the National Tidal Datum Epoch: January 1, 1983 to December 31, 2001.

⁴⁸ National Oceanic and Atmospheric Administration. *Tides & Currents – Datums for 8531680, Sandy Hook NJ.* Available at: https://tidesandcurrents.noaa.gov/datums.html?id=8531680. Accessed September 2019.

practicable, reducing the total amount of runoff and allowing for more direct recharge of stormwater into the ground.

There would be a need for limited dewatering during construction of the Proposed Project due to the required excavation and the use of driven deep pile foundations. Any required dewatering during construction would be conducted in accordance with applicable regulations. The construction manager would determine appropriate dewatering means and methods as necessary in accordance with prevailing regulations.

Long Island Comprehensive Waste Treatment Management Plan (208 Study)

As previously described, the Subject Property is within Hydrogeologic Zone VIII. The Highest Priority Areawide Alternative described in the *208 Study* that is most relevant to the Proposed Action is:

Control stormwater runoff to minimize the transport of sediments, nutrients, metals, organic chemicals and bacteria to surface waters.

The potential impacts of the Proposed Action with respect to stormwater runoff are discussed in the ensuing sub-section, *Stormwater*. As detailed below, the Proposed Action includes a stormwater management system designed to control flow, improve quality, and be protective of groundwater and surface water resources, in accordance with the applicable New York State, Nassau County, and Town of North Hempstead requirements.

The Proposed Action would involve the development and implementation of a SWPPP, which would conform to the relevant requirements of and would be subject to approval by the Town of North Hempstead. The Proposed Action would also employ various erosion and sediment control measures designed to minimize, to the greatest extent practicable, erosion and sedimentation impacts.

The other Highest Priority Area Wide Alternative for Hydrogeologic Zone VIII relates to the siting of new landfills, which is not relevant to the Proposed Action.

Overall, the Proposed Action would incorporate measures designed to minimize potential impacts to groundwater resources and nearby receiving waters (i.e., Hempstead Harbor). As such, the Proposed Action is consistent with the relevant portions of the *208 Study*.

Nassau County Groundwater Monitoring Program Report

As previously described, the *Nassau County Groundwater Report* documented improvements in raw groundwater quality due to, in part, the widespread installation of sanitary sewers throughout Nassau County. Under the Proposed Action, an out-of-district connection would be made to the Port Washington Water Pollution Control District, Nassau County or another local sewer district. The Proposed Action would contribute to the expanded use of sanitary sewers throughout Nassau County and, therefore, contribute to the continued improvement in raw groundwater quality.

According to the *Nassau County Groundwater Report*, the other main contributor to improved raw groundwater quality are the regulatory programs governing the use, storage and disposal of hazardous substances.

As detailed in **Section 0**, a Phase I ESA performed at the Subject Property indicated the presence of various hazardous materials throughout the Subject Property, including

- > Maintenance products (cleaning supplies, painting supplies)
- > Gasoline cans
- > 55-gallon storage drums containing engine oil and hydraulic oil
- > Compressed gas cylinders

The above-referenced materials would be removed from the Subject Property and disposed of in accordance with prevailing regulations, in accordance with the Phase I ESA recommendations.

In addition, the Limited Phase II ESA completed for the Subject Property in December 2020 by PWGC recommended that further actions be taken to remediate areas affected by petroleum-related contamination. Appropriate remediation activities would be undertaken, in accordance with prevailing regulations, to remediate the affected soils. Overall, as described in more detail in **Section 0**, the Proposed Action would involve remediation activities that would remove hazardous materials from the Subject Property and thereby minimize the potential contamination of groundwater resources. The Proposed Action would therefore contribute to the continued improvement in groundwater quality by disposing of hazardous materials in a manner that is consistent with prevailing regulations.

The Nassau County Groundwater Report indicated that rising irrigation demands should be targeted as a means to control future increases in annual water demand, which impacts groundwater quantity. The Proposed Action would involve a nominal amount ($0.46\pm$ acre) of landscaping, and would utilize relatively low-maintenance, native plant species. In addition, the Proposed Action would capture stormwater runoff and utilize it for irrigation purposes, thereby offsetting some, if not all, of the Proposed Action's irrigation demands. Based on the foregoing, the Proposed Action would minimize irrigation demands, to the maximum extent practicable.

Nassau County Public Health Ordinance

Article X

As noted above, the Subject Property is not located within a SGPA and, as such, the provisions of Article X of the NCPHO are not applicable.

Article XI

As described above, Article XI of the NCPHO, was prepared to "...safeguard the water resources of the County of Nassau from contamination by toxic and hazardous materials" by requiring the proper storage and handling of toxic and hazardous materials.

As noted in **Section 0**, the Proposed Action would involve the removal of various hazardous material storage containers, including:

- > Maintenance products (cleaning supplies, painting supplies)
- Gasoline cans
- > 55-gallon storage drums containing engine oil and hydraulic oil

> Compressed gas cylinders

Following the removal of these hazardous material storage containers, and in accordance with the intent of Article XI, the potential for the on-site discharge of toxic and hazardous materials from such containers would be precluded.

Overall, based on the foregoing analyses, no significant adverse groundwater impacts are expected to result from implementation of the Proposed Action.

3.3.3.2 Stormwater

As illustrated in the Grading and Drainage Plan (**Appendix C**), the Proposed Project would include the installation of a comprehensive stormwater management system consisting of a series of concrete leaching galleys to accommodate the drainage needs across the Subject Property. The site drainage system would include 248 three-foot-high leaching galleys and 202 five-foot-high leaching galleys, with a total storage capacity of 56,128± cubic feet (cf), providing for a total of five inches of storage on the Subject Property.

The Proposed Action would result in a 0.96±-acre decrease in impervious surfaces and a 0.21±-acre increase in pervious lawn/landscaped areas. In addition, the Proposed Action would involve the installation of 0.52± acres of pervious pavers/pavement. Due to the overall increase in pervious surface coverage, the Proposed Action would be expected to result in a net decrease in the amount of stormwater runoff generated on-site. As compared to the existing conditions described above under which untreated stormwater runoff drains directly to Hempstead Harbor along the waterfront, implementation of the stormwater management system would ensure that the Subject Property meets all local, county, and state stormwater regulations, as detailed below.

Overall, the Proposed Project is not anticipated to result in stormwater impacts as a result of proper drainage system design, site grading, and implementation of proper erosion and sediment control measures, as detailed below.

New York State Pollutant Discharge Elimination System (SPDES) Program

As the Proposed Action involves ground disturbance of more than one acre, coverage under the SPDES GP-0-20-001 (or subsequent version) would be obtained prior to implementation of the Proposed Action.

A SWPPP, designed in accordance with the prevailing Nassau County and Town of North Hempstead requirements, would be developed and implemented prior to the implemented of the Proposed Action. The SWPPP would be reviewed by the Town of North Hempstead for conformance with the requirements of GP-0-20-0001 and the relevant requirements of Chapter 46A of the Town Code. The MS4 SWPPP Acceptance Form (certifying the Town's acceptance of the SWPPP) would then be filed with the Notice of Intent submission to the NYSDEC to obtain permit coverage.

Per standard SWPPP regulations and requirements of GP-0-20-001, standard erosion and sediment control measures would be implemented prior to the commencement of construction activities; these measures would be maintained through completion of construction of the Proposed Action. As described in **Section 3.1.3**, such measures would include, but not be limited to, the following:

- Drainage inlets would be protected from sediment build-up through the use of sediment barriers, sediment traps, etc., as required.
- > Clearing and grading would be scheduled in order to minimize the size of the exposed area and the length of time the area is exposed.
- Sediment barriers (silt fences, hay bales, etc.) would be installed prior to any grading work along the limits of disturbance; same would be maintained for the duration of the proposed work.
- Graded and stripped areas and stockpiles would be kept stabilized through the use of temporary seeding, or other effective covering, as required.
- > Fugitive dust control measures, such as the covering of stockpiles, temporary seeding, use of a water truck during extended dry periods, etc., would be implemented as needed.
- > A stabilized construction entrance would be maintained to prevent soil and loose debris from being tracked onto area roadways.

All erosion and sediment control measures would be designed and maintained in accordance with the relevant portions of the *New York Standards and Specifications for Erosion and Sediment Control*, as well as the *NYS Stormwater Manual*. The proposed erosion and sediment control measures would also be expected to minimize, to the greatest extent feasible, erosion and sedimentation impacts to Hempstead Harbor; a detailed evaluation of potential impacts to this body of water is included in **Section 3.4** of this DEIS.

Pursuant to the requirements of GP-0-20-001 and Chapter 46A of the Town Code, routine maintenance of post-construction stormwater management practices is required to ensure continuous and effective operation of each practice. As such, the SWPPP would include a maintenance schedule for the proposed stormwater management practices. Additionally, pursuant to § 46A-9 of the Town Code, and prior to filing for termination of coverage under GP-0-20-001, an Operation and Maintenance Plan outlining the long-term maintenance requirements of on-site stormwater management practices would be prepared. Pursuant to Part V.Z.5 of the GP-0-20-001 and § 46A-9 of the Town Code, the owner or operator would modify the deed of record to include a deed covenant requirement for the continued operation and maintenance of these practices, in conformance with the Operations and Maintenance Plan.

As coverage under GP-0-20-001 would be obtained, and the aforementioned erosion and sedimentation control measures, as well as the water quality controls, would be implemented as part of the Proposed Action, no significant adverse erosion, sedimentation, or stormwater impacts (including those to the adjacent Hempstead Harbor) are expected.

Town of North Hempstead Storm Water Management Program Plan

As described previously, the Town SWMP details how the Town will implement the six MCMs required under the MS4 permit. Of these six MCMs, two are relevant to the Proposed Action: Construction Site Storm Water Runoff Control, and Post-Construction Storm Water Management.

With regard to Construction Site Storm Water Runoff Control, the Town SWMP notes that Chapter 46A of the Town Code was adopted, in part, to facilitate the implementation of this MCM. To control construction site stormwater runoff, Chapter 46A requires the submission of a SWPPP for Town review and acceptance; Chapter 46A also requires the regular inspection of stormwater management infrastructure during construction activities. As detailed above, the Proposed Action would conform with the requirements of Chapter 46A of the Town Code. In doing so, the Proposed Action would conform with the relevant requirements of this MCM. It is noted that many of the strategies detailed under this MCM pertain to organizational and procedural measures for the Town and are therefore not applicable to the Proposed Action.

With regard to Post-Construction Storm Water Management, the Town SWMP similarly notes that Chapter 46A sets forth standards to regulate post-construction stormwater runoff from development projects. As noted above, the Proposed Action would conform with the relevant regulations pertaining to the long-term operation and maintenance of post-construction stormwater management practices. The Proposed Action would thereby maintain stormwater management infrastructure in good working order, consistent with the intent of this MCM. The other strategies detailed under this MCM pertain to organizational and procedural measures for the Town and are therefore not applicable to the Proposed Action.

Overall, the Proposed Action would conform with the relevant portions of the Town SWMP.

Water Quality Improvement Plan for Hempstead Harbor

As one of its *Source Control Strategies*, the *Water Quality Improvement Plan for Hempstead Harbor* makes the following recommendation:

1. Minimize site disturbance and promote alternative, environmentally friendly landscaping techniques to decrease the potential for soil erosion, decrease pesticide and fertilizer use, and help conserve water.

As described above, the Proposed Action would utilize erosion and sedimentation control measures that would minimize, to the extent feasible, soil erosion and sedimentation. Further, as previously noted, the Proposed Action would involve a nominal amount (0.46± acres) of landscaping, and would utilize relatively low-maintenance, native plant species, which reduce irrigation needs. In addition, the Proposed Action would capture stormwater runoff to the extent practicable and utilize same for irrigation purposes, thereby offsetting some, if not all, of the Proposed Action's irrigation demands. Based on the foregoing, the Proposed Action would decrease the potential for soil erosion and would minimize irrigation demands to help conserve water, in accordance with the intent of this recommendation.

3.3.3.3 Floodplains

As previously indicated, portions of the Subject Property are located with SFHA Zones AE and VE. Under the Proposed Action, portions of the proposed residential building would be located within Zone VE, as would the entirety of the proposed promenade, pier, and marina. The Proposed Action is therefore subject to the provisions of Chapter 21 of the Town Code. The relevant portions of Chapter 21 (i.e., the generalized requirements for all developments, as well as the specific requirements for developments within Zone VE) are presented below in italicized text, and the Proposed Action's consistency therewith follows in non-italicized text.

§ 21-14. General standards

The following standards apply to new development, including new and substantially improved structures, in the areas of special flood hazard shown on the Flood Insurance Rate Map designated in § 21-6.

- A. Coastal high-hazard area. The following requirements apply within Zones V1-V20, VE and V or in an area of moderate wave action.
 - 1) All new construction, including manufactured homes and recreational vehicles on site 180 days or longer and not fully licensed for highway use, shall be located landward of the reach of high tide.

The Proposed Action involves the removal and replacement of the existing, deteriorated bulkhead with a new, intact bulkhead. The Proposed Building would be sited landward of the proposed replacement bulkhead, such that the Proposed Building would not be inundated during high tide, in accordance with the intent of this criterion. The proposed pier would similarly be surrounded by the proposed replacement bulkhead, such that the proposed pier would not be inundated during high tide. The proposed marina would be located below the reach of high tide, as is necessary to accommodate the proposed floating docks.

2) The use of fill for structural support of buildings, manufactured homes or recreational vehicles on site 180 days or longer is prohibited.

Structural support for the Proposed Building would be provided in accordance with the provisions of this chapter and, thus, would not involve the use of fill.

3) Man-made alteration of sand dunes which would increase potential flood damage is prohibited.

The Proposed Action does not involve the alteration of sand dunes, in accordance with this criterion.

§ 21-15. Standards for all structures.

A. Anchoring. New structures and substantial improvements to structures in areas of special flood hazard shall be anchored to prevent flotation, collapse or lateral movement during the base flood. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

The structural systems of the ground and lower levels of the Proposed Building would be composed of cast-in-place concrete; footings and columns would be supported by deep concrete piles. As such, the foundation of the proposed improvements would be designed to prevent flotation, collapse, or lateral movement during the base flood. Foundations would also be designed to resist strong winds, as required, in accordance with this standard.

- B. Construction materials and methods.
 - 1) New construction and substantial improvements to structures shall be constructed with materials and utility equipment resistant to flood damage.

The project architect has confirmed that the Proposed Building would be designed and constructed in accordance with all applicable floodplain development requirements. As such, the proposed improvements would be designed and constructed with materials and utility equipment that are resistant to flood damage, in accordance with this standard.

2) New construction and substantial improvements to structures shall be constructed using methods and practices that minimize flood damage.

The Proposed Action would utilize best management practices during the construction phase to minimize flood damage, as required by this standard. Relevant best management practices for mitigating flood damage would include, but not be limited to, waterproofed foundations, raised finished floors, raised mechanical equipment, and the incorporation of breakaway exterior walls. The proposed improvements would also be constructed in accordance with the requirements set forth in this chapter.

3) For enclosed areas below the lowest floor of a structure within Zone A1-A30, AE or AH, and also Zone A...

The portion of the Subject Property that lies within Zone AE would be left unaltered under the Proposed Action. As such, this criterion does not apply.

4) Within Zones V1-V30 and VE, and also within Zone V, if base flood elevation are available, or in an area of moderate wave action, new construction and substantial improvements shall have the space below the lowest floor either free from obstruction or constructed with non-supporting breakaway walls, open wood latticework or insect screening intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. The enclosed space below the lowest floor shall be used only for parking vehicles, building access or storage. Use of this space for human habitation is expressly prohibited. The construction of stairs, stairwells and elevator shafts are subject to the design requirements for breakaway walls.

The Proposed Building would contain two floor levels sited below the BFE of 16 feet amsl. These levels would incorporate breakaway exterior walls on three sides, which would be attached with clips designed to break under flood conditions. Thus, in accordance with this standard, the walls below the Proposed Building's lowest floor would be designed to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system.

It is noted that these two levels would be utilized primarily for parking, as well as other residential amenities (i.e., fitness space, lobby/leasing space, pool) and support spaces (i.e., storage spaces, elevator lobby). These two levels would not be used for human habitation. In the event of an impending flooding event (i.e., a hurricane), vehicles stored within these levels would be moved to an alternate location to minimize, to the greatest extent practicable, the loss or damage of property.⁴⁹

⁴⁹ It is anticipated that cars would be moved to a nearby development owned and operated by the Applicant, located further inland and outside of a flood hazard area.

C. Utilities.

- New and replacement electrical equipment, heating, ventilating, air conditioning, plumbing connection, or other service equipment shall be located at or above the base flood elevation or be designed to prevent water from entering and accumulating within the components during a flood and to resist hydrostatic and hydrodynamic loads and stresses. Electrical wiring and outlets, switches, junction boxes and panels shall be elevated to or above the base flood elevation unless they conform to the appropriate provisions of the electrical part of the Building Code of New York State or the Residential Code of New York State for location of such items in wet locations;
- 2) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- 3) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters. Sanitary sewer and storm drainage systems for buildings that have openings below the base flood elevation shall be provided with automatic backflow valves or other automatic backflow devices that are installed in each discharge line passing through a building's exterior wall; and
- *4)* On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

As noted above, the project architect has confirmed that the Proposed Building would be designed and constructed in accordance with all applicable floodplain development requirements. As such, the Proposed Building's HVAC equipment would be located above the respective BFE, and on the rooftop. In addition, the Proposed Action would be designed in accordance with the requirements of the respective utility providers, including requirements that minimize or eliminate the potential for infiltration of floodwaters into utility systems. It is noted that the Proposed Building would connect to a sanitary sewer system and would not involve the installation of on-site waste disposal systems.

§ 21-16.1 Residential structures (coastal high-hazard areas).

The following standards, in addition to the standards in § 21-14A, Coastal high-hazard areas, and § 21-14B, Subdivision proposals, and § 21-15, Standards for all structures, apply to new and substantially improved residential structures located in areas of special flood hazard shown as Zone V1-V30, VE or V, or in an area of moderate wave action, on the community's Flood Insurance Rate Map designated in § 21-6.

A. Elevation. New construction and substantial improvements shall be elevated on pilings, columns or shear walls such that the bottom of the lowest horizontal structural member supporting the lowest elevated floor (excluding columns, piles, diagonal bracing attached to the piles or columns, grade beams, pile caps and other members designed to either withstand storm action or break away without imparting damaging loads to the structure) is elevated to or above two feet above base flood elevation so as not to impede the flow of water.

In accordance with this standard, the lowest horizontal structural member supporting the Proposed Building's lowest finished floor would be elevated to at least two feet above the corresponding BFE. Within the vicinity of the Proposed Building, the highest BFE is 16 feet amsl. As such, the lowest horizontal structural member supporting the lowest elevated floor would be elevated to at least 18 feet amsl. It is noted that the Proposed Building's lowest finished floor elevation would be at 19 feet amsl and, thus, would provide a clearance of three feet above the respective BFE.

This sub-section of the Code (i.e., § 21-16.1) contains 13 additional sub-parts, which set forth standards pertaining to: determination of loading forces; foundation standards; pile foundation design; column foundation design; connectors and fasteners; beam-to-pile connections; floor and deck connections; exterior wall connections; ceiling joist/rafter connections; projecting members; roof sheathing; protection of openings; and breakaway wall design standards. It is respectfully submitted that these standards are highly technical and are beyond the scope of this DEIS. Therefore, these additional standards are not discussed any further. However, the Proposed Building has been designed and will be constructed in accordance with these standards, as required under this chapter.

§ 21-16.1 Nonresidential structures (coastal high-hazard areas).

In Zones VI-V30, VE, and also Zone V, if base flood elevations are available, or in an area of moderate wave action, new construction and substantial improvements of any nonresidential structure, together with attendant utility and sanitary facilities, shall have the bottom of the lowest member of the lowest floor elevated to or above two feet above the base flood elevation. Floodproofing of structures is not an allowable alternative to elevating the lowest floor to two feet above the base flood elevation in Zones V1-V30, VE and V.

The principal use of the Subject Property would be residential, although the Proposed Action contains non-residential elements. It is respectfully submitted that this standard is not necessarily intended for a water-dependent use that does not include any finished floors, such as the proposed marina. Still, it is noted that the proposed marina would conform with the general intent of this requirement, as described below.

The proposed marina would contain floating docks, which would be laterally restrained by piles extending to the respective BFE in which they are sited. The floating docks would not be fixed at a set lateral position but would rise and fall with the tide and with the elevation of the water. As such, in the event of flooding, the floating docks would remain atop the water elevation.

Other components of the proposed marina (i.e., fixed piers and bulkheads) would be designed to be inundated during a flooding event. Although these components would not be elevated to or above two feet above the BFE, their proposed design (i.e., to be intentionally inundated) would preclude adverse flooding impacts. Overall, the proposed marina would not be adversely impacted by flooding, consistent with the intent of this requirement.

Based on the above, the Proposed Action would be consistent with the relevant flood zone building requirements of the Town of North Hempstead, to the greatest extent practicable. Further, the Proposed Action would not result in the alteration of existing floodplains, nor would it alter existing BFEs. Thus, no significant adverse flooding impacts are anticipated.

New York State Community Risk and Resiliency Act and New York State Sea Level Rise Projections

Per the CRRA data presented above (**Table 3-5**), sea level could rise by a maximum of approximately 72 inches by the year 2100 under the "high" condition. However, this projection reflects the most extreme scenario. As to not contribute to a situation of severe over-design, VHB provides conservative estimates utilizing the "medium" to "high-medium" range sea level rise projections. Under the medium to high-medium range projections, sea level in the region is expected to increase by 34 to 47 inches.

As noted previously, the mean high water at Sandy Hook, the closest long-term NOAA tide gauge, is 2.65 feet ($31.8\pm$ inches) amsl. Thus, under the medium to high-medium range sea level rise projections, it can be expected that mean high water at Sandy Hook will increase to between $5.48\pm$ feet ($65.8\pm$ inches) and $6.57\pm$ feet ($78.8\pm$ inches) amsl by the year 2100.

The Proposed Building would be constructed such that the lowest horizontal structural member supporting the lowest elevated habitable floor would be at least two feet above the corresponding BFE, in accordance with the requirements of the Town's floodplain standards. Specifically, the lowest horizontal structural member supporting the lowest elevated habitable floor would be raised to 19 feet amsl, which is well above the high-medium range sea level projection. Even under the high-medium sea level rise projection of 6.57± feet amsl, the Proposed Building would remain above projected sea levels for the year 2100. The proposed pier and promenade would be constructed to an elevation of 9± feet amsl, above the high-medium sea level rise projection.

The proposed marina would contain, among other improvements, four floating docks. These docks would be laterally restrained by piles extending to the BFE (i.e., $16\pm$ or $19\pm$ feet amsl) in which they are sited. The floating docks would not be fixed at a set lateral position but would rise and fall with the current water elevation, up to a maximum height of the corresponding BFE (i.e., the top of the pile). As such, the floating docks would be able to rise with sea level rise, as needed.

Overall, the Proposed Action is not expected to be adversely impacted by sea level rise.

According to *The SEQR Handbook*, an assessment of sea level rise impacts should include an evaluation of the impacts on the useful life of infrastructure (i.e., the expected number of years for which the infrastructure will be functional). However, the Proposed Action does not involve the construction of any infrastructure projects, other than service infrastructure associated with the Proposed Building itself.

3.3.4 Proposed Mitigation

Though no significant adverse impacts to water resources have been identified, various measures have been incorporated into the overall project design to ensure compliance with the prevailing regulations and relevant management plans, including the following:

- > A SWPPP would be developed and implemented prior to the start of any construction activities, which would be reviewed and accepted by the Town for consistency with all relevant requirements.
- > The SWPPP would include a detailed erosion and sediment control plan identifying the specific erosion and sediment control measures to be implemented.

- > Drainage infrastructure would be installed first during construction to minimize potential for off-site stormwater discharges.
- > Site remediation activities would be undertaken, removing potentially hazardous groundwater contaminants from the Subject Property.
- > Sustainable practices, such as cisterns and native plantings, will be utilized to capture rainwater and stormwater runoff and minimize the need for irrigation.

3.4 Ecological Resources

3.4.1 Regulatory Framework

As the Subject Property is composed of upland areas adjacent to Hempstead Harbor and also includes 4.48± acres of underwater lands within the harbor, the proposed terrestrial and in-water work of the Proposed Action are subject to the following federal, New York State, and local regulatory programs governing wetlands, surface waters, and other ecological resources.

3.4.1.1 Federal

- Clean Water Act The Clean Water Act regulates point sources of water pollution, such as stormwater runoff, the discharge of dredged or fill material into navigable waters, and other regulated waters (collectively referred to as "waters of the United States'), as well as non-point source pollution (e.g., runoff from streets, construction sites, etc.) that enter waters of the United States from sources other than pipe/outfalls. Jurisdictional determinations and permitting pursuant to Section 404 of the Clean Water Act are administered by the United States Army Corps of Engineers (USACE). Pursuant to Section 401 of the Clean Water Act, applicants for discharges to navigable waters in New York State must also obtain a Water Quality Certification from the New York State Department of Environmental Conservation (NYSDEC). As the Proposed Action includes placement of fill and structures within regulated waters, as well as generation of stormwater during construction, it is subject to USACE permitting under Section 404 of the Clean Water Act and would also require an NYSDEC Water Quality Certification, pursuant to Section 401 of the Clean Water Act.
- Rivers and Harbors Act of 1899, Section 10 Section 10 of the Rivers and Harbors Act of 1899 requires USACE authorization for the construction of any structure (e.g., pilings, piers, bridge abutments, etc.) in or over navigable water of the United States, the excavation from or deposition of material in these waters, or any obstruction or alteration in navigable waters of the United States. The purpose of this Act is to protect navigation and navigable channels. As the Proposed Action would result in the construction of structures, placement of fill, and dredging within navigable waters, it is subject to USACE regulation and permitting under Section 10 of the Rivers and Harbors Act.
- Endangered Species Act The Endangered Species Act provides for the protection of Endangered and Threatened species and the critical habitats on which these species depend for survival. Review under Section 7 of the Endangered Species Act is administered by the United States Fish and Wildlife Service (USFWS) and/or the National Oceanographic and Atmospheric Administration (NOAA) National Marine Fisheries

Service (NMFS). As the Proposed Action would require federal (USACE) permitting for various activities within regulated waters, NMFS and/or USFWS review under Section 7 of the Endangered Species Act would be required as part of the overall USACE permitting process.

Magnuson-Stevens Act - The Magnuson-Stevens Act outlines the process for the NMFS to comment on actions proposed by federal agencies (i.e., by issuing permits, authorization, or funding for projects) that may adversely impact areas designated as Essential Fish Habitat, which is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Hempstead Harbor has been designated as Essential Fish Habitat by the NMFS. Therefore, as a federal permitting agency with jurisdiction over the surface waters at the Subject Property, the USACE is required by the Magnuson-Stevens Act to coordinate NMFS review of the Proposed Action.

3.4.1.2 New York State

- Tidal Wetlands Act, Article 25, ECL, Implementing Regulations 6 NYCRR § 661 The NYSDEC administers the tidal wetlands regulatory program and the mapping of the State's tidal wetlands. A permit is required for most land uses and activities within regulated tidal wetlands or wetland adjacent areas, which extend up to 150 feet inland from the tidal wetland boundary within New York City and up to 300 feet inland from the tidal wetland boundary elsewhere in New York State. As the Proposed Action includes installation of structures, placement of fill, dredging, and other regulated activities within tidal wetlands and upland areas under NYSDEC jurisdiction, Article 25 review and permitting would be required.
- Protection of Waters Program, Article 15, Title 5 ECL, Implementing Regulations 6 NYCRR § 608 - The NYSDEC administers the Protection of Waters Program to preserve and prevent undesirable impacts to rivers, streams, lakes, and other water bodies. Regulated activities under the Protection of Waters Program include restrictions and permitting requirements for excavation or placement of fill in navigable waters. As the Proposed Action includes both excavation (dredging) and placement of fill in navigable waters, an NYSDEC Protection of Waters permit would be required.
- Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern, Articles 11 and 13 ECL, Implementing Regulations 6 NYCRR § 182 New York State Endangered, Threatened and Special Concern wildlife species are listed in 6 NYCRR Part 182, which prohibits the taking, import, transport, possession or selling of these species. Pursuant to 6 NYCRR Part 182.8, consultations and potential permitting with the NYSDEC are required for any action that might result in incidental take of Endangered or Threatened wildlife species. As the Proposed Action includes work within wetland and surface water habitats known to support New York State-listed Endangered, Threatened, and Special Concerned species, NYSDEC review of the Proposed Action under 6 NYCRR § 182, would be required.
- Protected Native Plants, ECL Article 9-1503, Implementing Regulations 6 NYCRR § 193.3
 The NYSDEC's Protected Native Plants Program provides protections for four categories of protected plants: Endangered, Threatened, Rare and Exploitably Vulnerable. Pursuant to 6 NYCRR § 193.3(e), it is a violation to pick, pluck, sever, remove, damage by the application of herbicides or defoliants, or carry away, without the consent of the landowner, any protected plant in New York State. As such, any potential

removal of protected native plants from the Subject Property under the Proposed Action would require property owner authorization.

3.4.1.3 Town of North Hempstead

- Public Waterways; Structures Pursuant to the Town of North Hempstead Town Code § 70-2 (B) (Public Waterways; Structures), it is the legislative intent of the Town to "prevent the degradation of marine ecosystems that may be caused by the improper construction and placement of structures and bulkheads in waterways." Therefore, pursuant to § 42-5(A), a permit from the Town Clerk is required to construct, maintain, erect, enlarge, install, alter, improve, remove, or demolish, any structure located over, on, into, or adjacent to any Town waterway. As defined in § 42-4, regulated structures include, but are not limited to, docks, piers, bulkheads, floats, permanently moored vessels, and aids to navigation. As the Proposed Action would reincludes construction of piers, docks, bulkheads and other structures within and adjacent to Town waterways, Town review and permitting under § 42 would be required
- Stormwater Pollution Prevention Plans Pursuant to the Town of North Hempstead Town Code § 70-201.8(B)(1)(b), SWPPPs for construction activities within the Town must include site maps/construction drawings showing any wetlands and drainage patterns that could be affected by the project. In addition, § 70-201.8 further details the various Town SWPPP requirements, conditions, and pollution prevention measures intended to avoid or minimize potential adverse impacts to receiving waters, including wetlands and surface waters. A detailed description of the Town SWPPP that would be required for the Proposed Action is provided in Section 3.1.1.

3.4.2 Existing Conditions

Existing ecological condition at the Subject Property and vicinity were assessed through desktop review of government and non-government agency maps, databases, and records, as noted throughout the text, as well as an ecological field survey of the Subject Property conducted by a Certified Ecologist and Professional Wetland Scientist on July 20, 2021.

3.4.2.1 Habitats and Vegetation

The Subject Property is located on the western shore of Hempstead Harbor and also includes underwater lands within the harbor, which is an approximately 1,500-acre estuarine embayment that is connected to Long Island Sound to the north. The harbor is bounded by landforms and municipalities in other directions, including the Village of Roslyn to the south, the City of Glen Cove and the Town of Oyster Bay to the east, and the Town of North Hempstead to the west. As an estuary, Hempstead Harbor is an interface zone where saline waters from Long Island Sound mix with freshwater from the adjacent uplands within the watershed surrounding the harbor via creeks, overland flow, stormwater discharges, and groundwater inputs. Hempstead Harbor is divided into two distinct sections by North Hempstead Beach Park, which is a spit of land located to the south of the Subject Property that extends eastward from the western shore of the harbor towards the eastern shore. The outer portion of Hempstead Harbor to the north of North Hempstead Beach Park is composed of waters that range between six and 20 feet deep at mean low water, while the more protected inner harbor to the south of North Hempstead Beach Park is characterized

by comparatively shallow conditions, with depths of six feet or less at mean low water.⁵⁰ The tidal range within Hempstead Harbor is 7.4± feet on average, but increases to as high as 8.7 feet during spring tide conditions.⁵¹ As a result, the shallow inner harbor contains areas of intertidal mudflats that are exposed at low tide, and vegetated salt marsh communities also occur within the inner harbor. Much of the outer harbor and portions of the inner harbor are bordered by steep bluffs and headlands. Land uses surrounding Hempstead Harbor include a mix of residential uses, industrial sites, commercial development, recreational boating facilities, parklands, and areas of undeveloped land.

As observed during the ecological field survey and shown on **Table 3-10**, 4.48± acres of the 7.17± acre Subject Property is composed of subtidal and intertidal wetlands of Hempstead Harbor, which include concrete-armored shoreline structures and the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris. The 2.69±- acre terrestrial portion of the Subject Property is composed of both paved and unpaved lands and includes site buildings, construction supply stockpiles, and a concrete platform that extends eastward from the Subject Property into Hempstead Harbor, all of which were created in association with historical and ongoing site use as a sand and gravel storage facility. Vegetation at the Subject Property is limited in extent and confined primarily to the site perimeters or otherwise isolated areas that are not covered with impervious surfaces or subject to the frequent ground disturbance that characterizes the majority of the site. Based on these observations, the entire terrestrial portion of the Subject Property and adjacent armored shorelines along Hempstead Harbor are cultural ecological communities, which are defined as ecological communities that have been created or substantially altered by humans.

In order to further characterize the observed terrestrial site conditions described above, the New York Natural Heritage Program (NYNHP) publication *Ecological Communities of New York State*⁵² (ECNYS) was consulted. This guidance document provides detailed descriptions and includes global and state rarity rankings for many habitats found within New York State. VHB further consulted the United States Fish and Wildlife Service (USFWS) publication *Classification of Wetlands and Deepwater Habitats of the United States*⁵³ (CWDHUS) to identify and describe the tidal habitats of Hempstead Harbor that occur at the Subject Property. Using the two aforementioned references, six ECNYS ecological communities and two CWDHUS wetland/deepwater habitats were identified at the Subject Property during the field surveys, as detailed in **Table 3-6**, below and shown in **Figure 3-9**.

⁵⁰ New York State Department of State. Significant Coastal Fish and Wildlife Habitats. Available at https://dos.ny.gov/significant-coastal-fishwildlife-habitats Accessed August 2021.

⁵¹ Hempstead Harbor Protection Committee. 2007. Draft Application for Federal No-Discharge Zone Designation, Hempstead Harbor, Nassau County, New York.

⁵² Edinger, G.J., et al. (editors). 2014. Ecological Communities of New York State. Second Edition. New York Natural Heritage Program, NYSDEC.

⁵³ Cowardin, Lewis M., et. al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior Fish and Wildlife Service Office of Biological Services.

ECNYS Community	Global/NYS Rarity Ranking	Community Distribution	Habitat Functional Value ¹
Unpaved Road/Path	Unranked Cultural Community	Throughout NYS	Poor
Paved Road/Path	Unranked Cultural Community	Throughout NYS	Poor
Construction/Road Maintenance Spoils	Unranked Cultural Community	Throughout NYS	Poor
Urban Structure Exterior	Unranked Cultural Community	Throughout NYS	Poor
Mowed Lawn	Unranked Cultural Community	Throughout NYS	Poor
Estuarine Riprap/Artificial Shore	Unranked Cultural Community	Coastal Lowlands, Manhattan Hills, Hudson Valley and Hudson Highlands Ecozones	Poor
Estuarine Subtidal, Unconsolidated Bottom, N/A Subtidal (E1UBL)		Tidal Estuaries in NYS	High
Estuarine Intertidal, Unconsolidated Shore, Sand, Regularly Flooded (E2US2N)		Tidal Estuaries in NYS	Fair

Table 3-6 Existing Ecological Communities and Wetland/Deepwater Habitats

¹ Based on VHB's field observations on July 20, 2021.

Figure 3-9: Existing Ecological Communities



West Shore Residences 145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Subject Property

- E1UBL Estuarine Subtidal, Unconsolidated Bottom, Subtidal
- E2US2N Estuarine Intertidal, Unconsolidated Shore, Sand, Regularly Flooded
- ERAS Estuarine Riprap/Artificial Shore
- ML Mowed Lawn
 - UPL Upland Cultural Communities (Unpaved Road/Path, Paved Road/Path, and Construction/Road Maintenance Spoils)
 - USE Urban Structure Exterior

Note: All community boundaries are approximate.

Source: NYNHP's Ecological Communities of New York State (Edinger et. al., 2014); USFWS' Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et. al., 1979)

In addition to providing rarity rankings and community distributions, **Table 3-6** also provides a habitat functional value for each of the eight ecological communities and wetland/deepwater habitats identified at the Subject Property, based on VHB's qualitative field observations of various key ecological indicators, including overall degree of disturbance, vegetative community structure, species diversity, non-native/invasive species abundance, and wildlife habitat value.

Significantly, the six ecological communities that compose the terrestrial portions of the Subject Property have not been assigned rarity rankings by the NYNHP. Instead, they are designated by the NYNHP as unranked cultural communities, due to their artificial origin, disturbed/developed conditions, and wide distribution throughout New York State. The following provides a description of the six ecological communities, based upon their respective ECNYS community definitions, and supplemented with qualitative field evaluations, vegetation observations, and habitat functional values.

The ECNYS Paved Road/Path and Urban Structure Exterior communities describe the paved surfaces and built structures that occur at the Subject Property, respectively. The two unvegetated cultural communities do not function as substantial habitat areas for plants and most wildlife, and, therefore, are largely insignificant from an ecological perspective. Accordingly, the two communities provide poor habitat functional value. Similarly, Unpaved Road/Path and Construction/Road Maintenance Spoils are ECNYS unranked cultural communities that describe the pervious yet unvegetated surfaces that comprise the majority of the construction supply yard, where constant ground disturbance by trucks and heavy equipment preclude the establishment of vegetation. As a result, the two communities are largely insignificant from an ecological perspective and provide poor habitat functional value. The concrete platform that extends eastward from the Subject Property into Hempstead Harbor is also largely unvegetated, with the exception of herbaceous vegetation that occurs sporadically in cracks and gaps in the surface of the structure. Additional concrete or otherwise armored shorelines occur along the waterfront to the north and south of the platform. The artificial shoreline structures are collectively described by the unranked ECNYS Estuarine Riprap/Artificial Shore community. Similar to most armored shoreline structures, the shoreline structures at the Subject Property function as a physical barrier between upland areas and the adjacent tidal communities, thereby preventing or restricting nutrient cycling, wildlife movement, and the establishment of vegetated tidal wetland habitats. Accordingly, the Estuarine Riprap/Artificial Shore community at the Subject Property provides poor habitat functional value.

As described above, the ecological communities that occur at the Subject Property are largely unvegetated and the Subject Property as a whole does not support any vegetated ECNYS communities. As a result, the Subject Property is not a significant source of vegetated habitat or native plant diversity. As noted during the field survey, the limited vegetation that occurs at the Subject Property is restricted primarily to the site perimeters or otherwise isolated areas that are not covered with impervious surfaces or subject to the frequent ground disturbance that characterizes the majority of the site.

The species assemblage of trees that occur at the Subject Property is limited in number and is dominated by the non-native/invasive species Tree-of-Heaven (*Ailanthus altissima*), Norway Maple (*Acer plantanoides*), and black locust (*Robinia pseudoacacia*). Observed native trees include Boxelder (*Acer negundo*), Eastern Cottonwood (*Populus deltoides*), Black Cherry

(Prunus serotina), and Southern Catalpa (Catalpa bignonioides). The shrub and woody vine flora are similarly characterized by low species diversity and dominated by nonnative/invasives such as Multiflora Rose (Rosa multiflora), European Privet (Ligustrum vulgare), Amur Honeysuckle (Lonicera mackii), Wineberry (Rubus phoenicolasius), Porcelain Berry (Ampelopsis brevipedunculata), Asiatic Bittersweet (Celastrus orbiculatus), English Ivy (Hedera helix), and Japanese Honeysuckle (Lonicera tatarica). The few observed native shrubs and vines include Blackberry (Rubus allegheniensis), Bebb's Willow (Salix bebbiana), Poison Ivy (Toxicodendron radicans), Virginia Creeper (Parthenocissus guinguefolia), and Summer Grape (Vitis aestivalis). The observed herbaceous plant flora is composed of various pioneering "weedy" species that commonly occur at developed locations and disturbed areas, including Mugwort (Artemesia vulgaris), Lamb's Quarters (Chenopodium album), White Sweetclover (Melilotus albus), Common Cocklebur (Xanthium orientale), Red Clover (Trifolium pratense), Barnyard Grass (Echinochloa crus-galli), Seaside Goldenrod (Solidago sempervirens), Large Crabgrass (Digitaria sanguinalis), Common Milkweed (Asclepias syriaca), and Queen Anne's Lace (Daucus carota). A complete inventory of the vegetation observed at the Subject Property during the field survey is included in **Appendix I**.

As observed during the field survey, the majority of the intertidal zone and portions of the subtidal zone of Hempstead Harbor that occur at the Subject Property have been developed and disturbed through the installation of armored shoreline structures and the presence of the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris. As such, natural/undisturbed intertidal and shoreline areas at the Subject Property are limited in extent and occur only at the southernmost portion of the waterfront area. As noted on Table 3-6, the intertidal and subtidal habitats are representative of the CWDHUS Estuarine Intertidal, Unconsolidated Shore, Sand, Regularly Flooded (E2US2N) and Estuarine Subtidal, Unconsolidated Bottom, Subtidal (E1UBL) wetland habitats. The E2US2N wetland habitat describes the intertidal zone located between the mean high water and mean low water elevations that is alternately inundated and exposed during tidal cycles. At the Subject Property, the intertidal zone is limited in areal extent as compared to the subtidal zone and occurs in a narrow band within the nearshore area and adjacent to the shoreline. As noted during the field survey, the intertidal zone does not support vegetated wetland habitats and contains benthic (bottom) substrates ranging in size from sand to cobble-sized sediments. Due to the lack of vegetated wetland habitats and natural shorelines, as well as the presence of in-water structures and debris, the ecological value of the intertidal habitat at the Subject Property has been degraded and, therefore, it provides only a fair degree of habitat functional value.

The E1UBL wetland habitat describes the subtidal zone that is located seaward of mean low water and is therefore permanently inundated by water. The subtidal zone at the Subject Property occupies the majority of the site wetland area. With respect to the potential presence and extent of submerged aquatic vegetation within the subtidal zone, according to the New York State Seagrass Task Force, eel grass does not occur at or adjacent to the Subject Property.⁵⁴ Nevertheless, unlike the intertidal habitat described above, substantial portions of the subtidal zone at the Subject Property have not been impacted by structures associated with historical site uses and the waters and benthic habitats of the subtidal zone

⁵⁴ NYS Seagrass Task Force. 2009. Final Report of the NYS Seagrass Task Force.

are productive habitats for finfish, shellfish, and other aquatic organisms. Accordingly, the subtidal habitat at the Subject Property provides a high degree of habitat functional value.

Additional information regarding the tidal habitats at the Subject Property is provided in the Wetlands section below.

3.4.2.2 Wildlife

Based on disturbed and largely unvegetated conditions, as well as high levels of human presence and activity, available habitat at the terrestrial portions of the Subject Property for most wildlife species is limited. Therefore, the observed and expected terrestrial fauna is similarly limited and composed primarily of species adapted to disturbed/developed conditions and human interaction. The tidal waters of the Subject Property provide habitat for various organisms, including birds, finfish, shellfish, and other aquatic invertebrates. A summary of the observed and expected fauna at the Subject Property is provided below.

Birds

Similar to all States located on the eastern seaboard, New York State and the Subject Property occur within the Atlantic Flyway, which is a major north-south route for migratory birds in North America. To investigate both migratory and non-migratory bird diversity at the regional and local level, VHB reviewed the following databases:

- National Audubon Society Christmas Bird Count⁵⁵ According to this resource, 107 bird species were identified by North Shore Audubon and Huntington-Oyster Bay Audubon members during 159.37 total survey hours within the Northern Nassau County Region (which includes the Subject Property) during the December 19, 2020 regional bird count (Appendix I).
- Cornell Lab of Ornithology eBird⁵⁶ According to this resource, observers noted 65 avian species at Hempstead Harbor Town Park (aka, North Hempstead Beach Park, located adjacent to the south of the Subject Property) between 2012 and 2021, and 93 avian species at Bar Beach Town Park (located 0.35±-miles to the south of the Subject Property) between 2009 and 2021. Additionally, observers noted 119 avian species along the Hempstead Harbor Shoreline Trail (located 0.62±-miles to the south of the Subject Property) between 2016 and 2021 (Appendix I).
- New York State Breeding Bird Atlas⁵⁷ (NYSBBA) According to this resource, a total of 69 bird species were identified between 2000 and 2005 within the NYSBBA survey block that the Subject Property occurs in (Block 6052D). Of these species, 49 are confirmed as breeding, 17 are listed as probable breeders, and three are listed as possibly breeding within the survey block (Appendix I).

With respect to site-specific field observations, a total of 29 bird species were observed (i.e., seen and/or heard) at or over the Subject Property during the July 20, 2021 field survey (**Appendix I**). The majority of the birds observed at terrestrial portions of the Subject Property are species adapted to disturbed and developed conditions, and habitats that

⁵⁵ National Audubon Society. Christmas Bird Count. Available at: http://netapp.audubon.org/cbcobservation/ Accessed August 2021.

⁵⁶ Cornell Lab of Ornithology. eBird. Available at: https://ebird.org/explore. Accessed August 2021.

⁵⁷ McGowan, K.J. and K. Corwin, eds. 2008. The Atlas of Breeding Birds in New York State. Cornell University Press. Data also available at http://www.dec.ny.gov/animals/51030.html. Accessed August 2021.

support little or no vegetation, including Rock Pigeon (*Columba livia*), House Sparrow (*Passer domesticus*), European Starling (*Sturnus vulgaris*), and Mourning Dove (*Zenaida macroura*). While it is likely that the Subject Property provides potential nesting habitat for these species, suitable nesting habitat for other avian species that are less adapted to developed and largely unvegetated conditions is very limited. Nevertheless, the limited vegetation that occurs at the Subject Property offers foraging and perching opportunities for a number of common songbirds that occur in the area and were observed during the field survey, including American Robin (*Turdus migratorius*), Northern Oriole (*Icterus galbula*), Song Sparrow (*Melospiza melodia*), American Goldfinch (*Spinus tristis*), Blue Jay (*Cyanocitta cristata*), Barn Swallow (*Hirundo rustica*), and Carolina Wren (*Thryothorus ludovicianus*).

Due to vegetated and largely undisturbed conditions, the extensive woodland habitats that occur beyond West Shore Road to the west of the Subject Property provide habitat opportunities for more diverse range of birds, including a number of migratory warblers and other reclusive species adapted to woodland interior habitats. However, taking into account the disturbed and largely unvegetated conditions described above, it is unlikely that these species occur at the Subject Property, except perhaps as occasional transients.

Birds that occur in association with tidal waters and shoreline habitats were also observed along the Subject Property waterfront, including Red-Winged Blackbird (*Agelaius phoeniceus*), Mallard (*Anas platyrhynchos*), American Black Duck (*Anas rubripes*), Canada Goose (*Branta canadensis*), Fish Crow (*Corvus ossifragus*), Mute Swan (*Cygnus olor*), Double-crested Cormorant (*Phalacrocorax auritus*), Osprey (*Pandion haliaetus*), and several gull (*Larus*) species. Other avian species are known to occur within Hempstead Harbor. According to the New York State Department of State (NYSDOS), Hempstead Harbor is a waterfowl wintering area for species such as Greater Scaup (*Aythya marila*), Red-breasted Merganser (*Mergus serrator*), Mallard (*Anas platyrhynchos*), Bufflehead (*Bucephala albeola*), Brant (*Branta bernicla*) and others.⁵⁸ Additional resident bird species of Hempstead Harbor include Great Egret (*Ardea alba*), Snowy Egret (*Egretta thula*), Black-crowned Night Heron (Nycticorax nycticorax), Belted Kingfisher (*Megaceryle alcyon*), Red-throated Loon (*Gavia stellata*), and others.

It is expected that the Subject Property may be frequented by a number of avian species that were noted at nearby locations in the *eBird* and NYSDOS databases summarized above, including warblers and other migratory species, as well as shorebirds and waterfowl. However, due to the disturbed and largely unvegetated habitat conditions described previously, the Subject Property supports a significantly smaller avian species assemblage than that which occurs at the local database survey sites.

Mammals

No mammals were observed at the Subject Property during the field survey. In order to determine the mammal species that may utilize the Subject Property, existing surveys of Long Island mammalian populations, including *The Mammals of Long Island, New York*⁵⁹ were consulted. Based upon these resources, as well as an evaluation of existing ecological conditions, the expected mammalian fauna is limited, due to high levels of disturbance and human activity, as well as largely unvegetated conditions. Accordingly, the expected

⁵⁸ New York State Department of State. Significant Coastal Fish and Wildlife Habitats. Available at: https://dos.ny.gov/significant-coastal-fishwildlife-habitats Accessed August 2021.

⁵⁹ Connor, Paul F. 1971. The Mammals of Long Island. New York State University of New York, New York Museum and Science Service.

mammalian fauna includes a limited number of species adapted to these conditions, including Raccoon (*Procyon lotor*), Virginia Opossum (*Didelphis virginiana*), Eastern Gray Squirrel (*Sciurus carolinensis*), Norway Rat (*Rattus norvegicus*), and feral cats (*Felis catus*). Small rodent species (e.g., several species of mice, moles, and shrews) are expected to be the most abundant mammals at the Subject Property. However, due to their diminutive sizes and predominantly subterranean life histories, these species are not easily observed.

Herpetofauna

Due to the existing disturbed site conditions, a dearth of vegetated habitat, and a lack of permanent or semi-permanent freshwater habitats, the terrestrial portions of the Subject Property do not represent a significant habitat for the herpetofauna (amphibians and reptiles). The New York State Amphibian and Reptile Atlas Project⁶⁰ (NYSARAP) database includes species known to occur within the general surrounding area of northern Nassau County, based on surveys that occurred between 1990 and 1999 (Appendix I). The extensive vegetated and freshwater wetland habitats located beyond West Shore Road to the west of the Subject Property represents potential habitat for a number of the NYSARAP species. In contrast, the Subject Property provides potential habitat for just two NYSARAP herpetofauna species that are known to exhibit some tolerance for disturbed/developed conditions: Brown Snake (Storeria dekayi) and Eastern Garter Snake (Thamnophis sirtalis sirtalis). However, due to continuous ground disturbance across much of the site, the presence of even these tolerant species is unlikely. With respect to marine reptile species, Diamondback Terrapin (Malaclemys terrapin) has been documented within vegetated tidal marshes located at the southernmost reaches of Hempstead Harbor.⁶¹ However, the developed shoreline of the Subject Property does not provide the requisite vegetated tidal marsh habitat for this species.

Hempstead Harbor Fauna

Hempstead Harbor, including the 4.48± acres of tidal wetlands that occur at the Subject Property, is a Significant Coastal Fish and Wildlife Habitat (SCFWH), as designated by the NYSDOS. According to the SCFWH Assessment for Hempstead Harbor (**Appendix I**), the harbor is a productive nursery and forage habitat for marine finfish, including Striped Bass (*Morone saxatilis*), Scup (*Stenotomus chrysops*), Bluefish (*Pomatomus saltatrix*), Weakfish (*Cynoscion regalis*), Windowpane Flounder (*Scophthalmus aquosus*), Winter Flounder (*Pseudopleuronectes americanus*), Summer Flounder (*Paralichthys dentatus*), and Blackfish (*Tautoga onitis*), as well as the baitfish that sustain these species, including Atlantic Silversides (*Menidia menidia*), American Sandlance (*Ammodytes americanus*), Atlantic Menhaden (*Brevoortia tyrannus*), Mummichog (*Fundulus heteroclitus*), Striped Killifish (*Fundulus majalis*), and Bay Anchovy (*Anchoa mitchilli*). Shellfish resources in Hempstead Harbor include Blue Mussel (*Mytilus edulis*), Ribbed Mussel (*Geukensia demissa*), Atlantic Oyster (*Crassostrea virginica*), Softshell Clam (*Mya arenaria*), Razor Clam (*Ensis leei*), and others. Crustaceans such as Blue Crab (*Callinectes sapidus*) and other crab species, as well as various species of shrimp also occur in the harbor. The SCFWH Assessment indicates that Hempstead Harbor is also a

⁶⁰ New York State Department of Environmental Conservation. *New York State Amphibian and Reptile Atlas Project*. Available at: http://www.dec.ny.gov/animals/7140.html. Accessed August 2021.

⁶¹ New York State Department of State. Significant Coastal Fish and Wildlife Habitats. Available at https://dos.ny.gov/significant-coastal-fishwildlife-habitats Accessed August 2021.

valuable waterfowl wintering area for the Long Island Sound Region, and provides habitat for a variety of resident Gulls, wading birds, and other avian species.

According to the SCFWH Assessment, the chief threats to Hempstead Harbor are alteration of tidal patterns, construction of shoreline structures in any areas not previously disturbed by development, elimination of vegetated tidal marsh habitats and intertidal areas, unrestricted use of motorized vessels in sensitive areas, thermal discharges, and any activities that would degrade water quality within the bay, including waste disposal from vessels and upland sources, oil spills, excessive turbidity, and chemical contamination.

Hempstead Harbor, inclusive of the tidal wetlands that occur at the Subject Property, is designated as Essential Fish Habitat by NOAA. Essential Fish Habitat is defined as: "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." According to the NOAA Essential Fish Habitat Mapper,⁶² Hempstead Harbor is listed as Essential Fish Habitat for 14 finfish species (**Appendix I**). The 14 species and their respective life stages are summarized in **Table 3-7**.

Scientific Name	Common Name	Life Stages	
Pseudopleuronectes americanus	Winter Flounder	Eggs, Larvae, Juvenile, Adult	
Leucoraja erinacea	Little Skate	Juvenile, Adult	
Clupea harengus	Atlantic Herring	Juvenile, Adult	
Pollachius	Pollock	Juvenile, Adult	
Urophycis chuss	Red Hake	Eggs, Larvae, Juvenile, Adult	
Scophthalmus aquosus	Windowpane Flounder	Eggs, Larvae, Juvenile, Adult	
Leucoraja ocellata	Winter Skate	Juvenile, Adult	
Stenotomus chrysops	Scup	Eggs, Larvae, Juvenile, Adult	
Loligo pealeii	Longfin Inshore Squid	Eggs, Juvenile, Adult	
Scomber scombrus	Atlantic Mackerel	Eggs, Larvae, Juvenile, Adult	
Pomatomus saltatrix	Bluefish	Juvenile, Adult	
Peprilus triacanthos	Atlantic Butterfish	Eggs, Larvae, Adult	
Paralichthys dentatus	Summer Flounder	Juvenile, Adult	
Centropristis striata	Black Sea Bass	Juvenile	

Table 3-7 Essential Fish Habitat Species

As shown on **Table 3-7**, the waters and substrates within the harbor represent suitable habitat for one for more of the life stages of the 14 listed species. Hempstead Harbor also provides habitat for important prey fish species such as Atlantic Silversides, Mummichog, and Banded Killifish, that Bluefish and other Essential Fish Habitat species depend on as food sources during juvenile and adult life stages. With respect to habitat conditions at the Subject Property, it is important to note that the existing environmental conditions described above, including armored shorelines, a lack of vegetated tidal wetlands, in-water structures and debris, and the absence of eel grass may represent limiting factors for some of the 14 Essential Fish Habitat species and has likely lowered the overall habitat value of the intertidal zone and portions of the subtidal zone for some of the listed species life stages.

⁵² National Oceanic and Atmospheric Administration. Essential Fish Habitat Mapper. Available at: https://www.habitat.noaa.gov/protection/efh/efhmapper/. Accessed August 2021.

3.4.2.3 Rare/Protected Species

No New York State or federally listed plant or wildlife species were observed at the terrestrial portions of the Subject Property during the field survey.

According to correspondence from the NYNHP, dated August 26, 2021, no records currently exist for known occurrences of New York State-listed animals, plants, or significant natural communities at the Subject Property (**Appendix I**).

With respect to federally listed species, the USFWS Information for Planning and Consultation (IPaC) Resources List⁶³ includes four federally listed wildlife species and two plant species that are known to occur in parts of Nassau County, and, therefore, have the potential to occur at the Subject Property, if suitable species habitat exists (**Appendix I**). A summary of the USFWS federally listed species is provided in **Table 3-8**.

⁶³ United States Fish and Wildlife Service. Information Planning and Consultation Online System. Available at: http://ecos.fws.gov/ipac/. Accessed August 2021.
Scientific Name	Common Name	Listing ¹	Habitat ^{2,3}	Field Survey Results
Agalinus acuta	Sandplain Gerardia	Federal (E) NYS (E)	Native grasslands with sandy, nutrient-poor soils.	Species not observed. No potential habitat occurs On-Site.
Amaranthus pumilus	Seabeach Amaranth	Federal (T) NYS (T)	Barrier island beaches between the foredune and the wrack line; open overwash areas behind the foredune.	Species not observed. No potential habitat occurs On-Site.
Calidris canutus rufa	Red Knot	Federal (T) NYS (T)	Uncommon, transient visitor to sandy coastal beaches during migratory stopovers.	Species not observed. Limited potential habitat occurs at the southernmost portion of the shoreline area.
Charadrius melodus	Piping Plover	Federal (T) NYS (T)	Annual migrant that breeds and forages during spring and summer on sandy coastal beaches.	Species not observed. Limited potential habitat occurs at the southernmost portion of the shoreline area.
Sterna dougallii dougalii	Roseate Tern	Federal (E) NYS (E)	Shoreline communities, including salt marsh islands and sparsely vegetated beaches.	Species not observed. Limited potential habitat occurs at the southernmost portion of the shoreline area.
Myotis septentrionalis	Northern Long-eared Bat	Federal (T) NYS (T)	Summer roost habitat includes live trees or snags (standing dead trees) ≥3 inches diameter, with exfoliating bark, cracks, crevices, and/or cavities.	Species not observed. On-Site trees are potential summer roost habitat

Table 3-8	USFWS	Federally	Listed S	Species
	001110	reactany	LISCCA	species

¹ E = Endangered T = Threatened

² New York Natural Heritage Program. Online Conservation Guides. Available at: https://guides.nynhp.org/ Accessed August 2021.

³ United States Fish and Wildlife Service. Long Island Recovery Efforts. Available at: https://www.fws.gov/northeast/nyfo/es/lirecovery.htm Accessed August 2021.

The southernmost portion of the Subject Property shoreline area includes a limited area of sandy beachfront along Hempstead Harbor that represents potential habitat for Red Knot, Piping Plover, and Roseate Tern. However, due its limited size and disturbed conditions, as well as the high levels of human activity and noise associated with industrial uses at the Subject Property and recreational uses at the adjacent North Hempstead Beach Park, it is unlikely that the area is frequented by any of the three species. Moreover, as noted

previously, the NYNHP correspondence indicates that no records for Red Knot, Piping Plover, or Roseate Tern exist for the Subject Property.

The limited number of trees at the Subject Property are potential summer roost habitat for Northern Long-eared Bat, although the developed/disturbed conditions and industrial activity at the Subject Property are not favorable to roost establishment by this species. The current USFWS and NYSDEC protections for Northern Long-eared Bat are predicated on the existence of NYNHP records of species occurrences within the vicinity of a project (as determined by acoustical, mist-netting, and/or radiotelemetry surveys), as well as the potential for tree removal. Specifically, the current USFWS Northern Long-eared Bat regulations prohibit tree removal between June 1 and July 31 within 150 feet of known, occupied roost trees in New York State, as determined by NYNHP records.⁶⁴ NYSDEC regulations for Northern Long-eared Bat in Nassau County prohibit tree removal between April 1 and October 31, inclusive, for projects located within 1.5 miles of known species occurrences, as determined by NYNHP records.⁶⁵ As noted previously, the NYNHP correspondence for the Subject Property and vicinity does not include records for Northern Long-eared Bat roost trees or occurrences. Accordingly, based on current NYNHP records, the USFWS and NYSDEC tree removal restrictions detailed above are not applicable to the Subject Property. Should records for future detections of roosts or occurrences become available, the USFWS and/or NYSDEC restrictions detailed above may apply to the Subject Property at that time.

With respect to marine species, federally listed marine wildlife are afforded protection under Section 7 of the federal Endangered Species Act. According to the NOAA ESA Section 7 Mapper,⁶⁶ Hempstead Harbor is located within the range of two federally listed fish species and four federally listed sea turtle species (**Appendix I**). The five species are summarized on **Table 3-9**.

⁶⁴ Federal Register Vol. 81, No. 1900. January 14, 2016.

⁶⁵ New York State Department of Environmental Conservation. Protection of Northern Long-eared Bat. Available at: https://www.dec.ny.gov/animals/106090.html Accessed August 2021.

⁶⁶ National Oceanic and Atmospheric Administration – ESA Section 7 Mapper. Available at: https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=1bc332edc5204e03b250ac11f9914a27. Accessed August 2021.

Scientific Name	Common Name	Listing ¹	Life Stage	Behavior
Acipenser	Atlantic	Federal (E)	Adult and	Migrating and
oxyrinchus	Sturgeon	NYS (P)	Subadult	Foraging
Acipenser	Shortnose	Federal (E)	Adult	Migrating and
brevirostrum	Sturgeon	NYS (P)		Foraging
Chelonia	Green Sea	Federal (E/T)	Adults and	Migrating and
mydas	Turtle	NYS (T)	Juveniles	Foraging
Lepidochelys	Kemp's Ridley	Federal (E)	Adults and	Migrating and
kempii	Sea Turtle	NYS (E)	Juveniles	Foraging
Dermochelys	Leatherback	Federal (E)	Adults and	Migrating and
coriacea	Sea Turtle	NYS (E)	Juveniles	Foraging
Caretta	Loggerhead	Federal (T)	Adults and	Migrating and
	Sea Turtle	NYS (T)	Juveniles	Foraging

Table 3-9	NOAA	Federally	Listed S	Species

¹ E = Endangered T = Threatened P = Protected

According to NOAA, Atlantic Sturgeon are bottom-feeding fish whose diet includes crustaceans, mollusks, worms, and bottom-dwelling fish. Atlantic sturgeon spawn within the Hudson River and other rivers, and adults and subadults migrate and forage within coastal estuaries.⁶⁷ As such, Hempstead Harbor represents potential migrating and foraging habitat for adult and juvenile Atlantic Sturgeon.

Similar to Atlantic Sturgeon, the smaller Shortnose Sturgeon are bottom dwellers that feed on insects, crustaceans, worms, and mollusks. Following spawning in the upper reaches of river systems, adult Shortnose Sturgeon move downstream to lower river areas and their estuaries.⁶⁸ Regarding population range in New York State, according to the NYSDEC, Shortnose Sturgeon is only found in the lower portion of the Hudson River, from the southern tip of Manhattan upriver to the federal dam at Troy.⁶⁹

With respect to the four sea turtle species listed on **Table 3-9**, the NYSDEC provides the following information on range and feeding behavior:⁷⁰

- > Juvenile and occasionally adult Green Sea Turtles have been sighted in Peconic Bay and other eastern Long Island waters. The diet of Green Sea Turtle consists of algae and sea grass.
- > Juvenile Loggerhead Sea Turtle are most frequently seen in nearshore bays and Long Island Sound, while adults and other age groups occur most frequently within pelagic

⁶⁷ National Oceanic and Atmospheric Administration. Atlantic Sturgeon Species Directory. Available at: https://www.fisheries.noaa.gov/species/atlantic-sturgeon. Accessed August 2021.

⁶⁸ National Oceanic and Atmospheric Administration. Shortnose Sturgeon Species Directory. Available at: https://www.fisheries.noaa.gov/species/shortnose-sturgeon Accessed August 2021.

⁶⁹ New York State Department of Environmental Conservation. Shortnose Sturgeon. Available at: https://www.dec.ny.gov/animals/26012.html Accessed August 2021.

⁷⁰ New York State Department of Environmental Conservation. Sea Turtles of New York. Available at: https://www.dec.ny.gov/animals/112355.html. Accessed August 2021.

waters 40+ miles off of the Long Island coast. Loggerhead Sea Turtle diet consists of shellfish, including Horseshoe Crabs, Spider Crabs, clams, and mussels.

- > Juvenile and adult Leatherback Sea Turtles occur within Long Island Sound, along the south coast of Long Island, and within the New York Bight. The diet of Leatherback Sea Turtle consists primarily of jellyfish.
- > Kemp's Ridley Sea Turtle have been documented within shallow-benthic environments of Long Island Sound, Block Island Sound, Gardiner's Bay and Peconic Estuary, and less frequently in Jamaica Bay, Lower New York Harbor, and Great South Bay. The turtles' diet includes shellfish, finfish, sea urchins, and jellyfish.

Based on the range and feeding behavior described above, Hempstead Harbor represents potential habitat for the four sea turtles described above, though no site-specific records for these species within Hempstead Harbor were included in the NOAA, NYNHP, or NYSDEC records and data summarized in this assessment.

According to the SCFWH Assessment for Hempstead Harbor, the New York State Special Concern bird of prey Osprey (*Pandion haliaetus*), nests within Hempstead Harbor on artificially constructed nest platforms and naturally constructed nests. The SCFWH Assessment further indicates that a number of rare bird species have been observed visiting Hempstead Harbor at frequencies varying from occasional to regular, including Short-eared Owl (*Asio flammeus*) and four additional New York State Endangered species, Least Tern (*Sterna antillarum*) and four additional Threatened species, and American Bittern (*Botaurus lentiginosus*) and 11 other Special Concern species (**Appendix I**).

On December 17, 2020, the USFWS listed of the Monarch Butterfly (*Danaus plexippus*) is as a "candidate species." According to the USFWS, candidate species are defined as:

...plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act, but for which development of a proposed listing regulation is precluded by other higher priority listing activities...Candidate species receive no statutory protection under the Endangered Species Act.⁷¹

During the breeding season, Monarchs lay their eggs on obligate host plants from the Milkweed (*Asclepias*) genus. Larvae emerge between two and five days later and develop through five larval stages over a period of nine to 18 days, feeding on Milkweed and sequestering toxic chemicals as a defense against predators.⁷² The larvae then pupate into a chrysalis before emerging six to 14 days later as an adult butterfly. Adult Monarchs feed on the nectar of many flowers during breeding and migration but will only lay eggs on Milkweed plants. As such, although Monarchs can be found in a wide variety of open habitats, including fields, roadsides, wetlands, gardens etc., host plants from the Milkweed genus are required for breeding and larval development, and flowering plants are required as food sources.

⁷¹ United States Fish and Wildlife Service. Candidate Species. Available at: <u>https://www.fws.gov/sites/default/files/documents/Candidate-Species.pdf#:~:text=Candidate%20species%20are%20plants%20and%20animals%20for%20which.is%20precluded%20by%20other%20high er%20priority%20listing%20activities. Accessed April 2022.</u>

⁷² United States Fish and Wildlife Service. Monarch Butterfly. Available at: <u>https://www.fws.gov/species/monarch-danaus-plexippus</u> Accessed April 2022.

As detailed previously, the Subject Property is comprised primarily of developed and disturbed areas that are largely unvegetated. The limited vegetation that occurs at the Subject Property is restricted to the site perimeters or otherwise isolated areas that are not covered with impervious surfaces or subject to the frequent ground disturbance that characterizes the majority of the site. As a result, the Subject Property is not a significant source of vegetated habitat and therefore does not provide significant breeding or feeding opportunities for Monarch Butterfly.

Wetlands

The majority of the intertidal wetlands and portions of the subtidal wetlands of Hempstead Harbor that occur at the Subject Property have been developed and disturbed through the installation of armored shoreline structures and the presence of the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris. As such, natural/undisturbed intertidal and shoreline areas at the Subject Property are limited in extent and occur only at the southernmost portion of the waterfront area. The intertidal and subtidal wetlands are representative of the CWDHUS Estuarine Intertidal, Unconsolidated Shore, Sand, Regularly Flooded (E2US2N) and Estuarine Subtidal, Unconsolidated Bottom, Subtidal (E1UBL) wetland habitats. The two wetland habitats are depicted on the USFWS National Wetland Inventory (NWI) Maps (**Figure 3-10**), which were created by the USFWS to provide information to the public on the extent and status of the Nation's wetlands and to aid agency biologists and others in wetland conservation efforts.⁷³

The E2US2N wetland habitat describes the intertidal zone located between the mean high water and mean low water elevations that is alternately inundated and exposed during tidal cycles. At the Subject Property, the intertidal zone is limited in areal extent as compared to the subtidal zone and occurs in a narrow band within the nearshore area and adjacent to the shoreline. The intertidal zone does not support vegetated wetland habitats and contains benthic substrates ranging from sand to cobble-sized sediments.

The E1UBL wetland habitat describes the subtidal zone that is located seaward of mean low water and is, therefore, permanently inundated by water. Unlike the intertidal wetlands described above, substantial portions of the subtidal zone at the Subject Property have not been impacted by historical site uses and the waters and benthic habitats of the subtidal zone are productive habitats for finfish, shellfish, and other aquatic organisms.

The Subject Property wetlands are mapped by the NYSDEC as Littoral Zone (LZ) tidal wetlands (**Figure 3-11**), which describe "all lands under tidal waters which are not included in any other [tidal wetland] category, extending seaward from shore to a depth of six feet at mean low water."⁷⁴ As described in **Section 3.4.1**, mapped tidal wetlands are regulated by the NYSDEC pursuant to ECL Article 25 (Tidal Wetlands Act) and its implementing regulations (6 NYCRR § 661). Pursuant to § 661, a tidal wetlands permit is required for most land uses and activities within mapped tidal wetlands and the tidal wetland adjacent area, which in Nassau County, extends up to 300 feet inland from the tidal wetland boundary. However, § 661 includes certain exceptions that can limit the tidal wetland adjacent area to

⁷³ United States Fish and Wildlife Service. National Wetland Inventory Overview. Available at: http://www.fws.gov/wetlands/NWI/index.html. Accessed August 2021.

⁷⁴ New York State Department of Environmental Conservation. Tidal Wetland Categories. Available at: https://www.dec.ny.gov/lands/5120.html Accessed August 2021.

less than 300 feet, including the limiting presence of the 10-foot amsl contour. According to § 661.4(b)(1))(iii), the limits of the NYSDEC tidal wetland adjacent area include:

...the elevation contour of 10 feet above mean sea level, except when such contour crosses the seaward face of a bluff or cliff, or crosses a hill on which the slope equals or exceeds the natural angle of repose of the soil, then to the topographic crest of such bluff, cliff, or hill...Pending the determination by the commissioner in a particular case, the most recent, as of the effective date of this Part, topographical maps published by the United States geological survey, Department of the Interior, having a scale of 1:24,000, shall be rebuttable presumptive evidence of such 10 foot elevation.

According to the USGS Topographic Map, Sea Cliff, New York Quadrangle, the 10-foot elevation contour occurs at the Subject Property at a location near, and generally parallel to, the shoreline (**Appendix I**). Further, based on VHB's field survey, bluffs, cliffs, or hills do not occur at the Subject Property. As such, pending official NYSDEC confirmation through a jurisdictional determination for the Subject Property and/or the issuance of a tidal wetlands permit, the limits of the NYSDEC's tidal wetland jurisdiction at the Subject Property appears to be the aforementioned 10-foot amsl contour.

Pursuant to § 661, the NYSDEC administers tidal wetland permitting for various regulated land uses and activities within regulated tidal wetlands and tidal wetland adjacent areas, including, but not limited to, vegetative clearing, grading, and ground disturbance, as well as utility/infrastructure installation, dredging, and construction of buildings, pavement, docks, piers, bulkheads, and other in-water-structures. Accordingly, pending NYSDEC confirmation of the jurisdictional limits described above, an NYSDEC tidal wetlands permit would be required for any regulated land uses or activities proposed for the tidal wetlands of Hempstead Harbor, as well as the adjacent upland area located seaward of the 10-foot elevation contour at the Subject Property.

With respect to federal wetland regulations, as a navigable water,⁷⁵ Hempstead Harbor is subject to USACE regulation under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. Permitting for regulated activities is administered by the USACE for various activities that occur seaward of mean high water (and in some cases, spring high water) of regulated tidal waters. USACE permits are required for dredging, placement of fill, construction of docks, bulkheads, and other in-water structures, and other regulated uses. Pursuant to Section 401 of the Clean Water Act, applicants for discharges of fill to navigable waters in New York State must also obtain a Clean Water Act Section 401 Water Quality Certification from the NYSDEC.

Regarding Town regulations for structures in waterways, pursuant to Town of North Hempstead Town Code § 42-5(A), a permit from the Town Clerk is required to construct, maintain, erect, enlarge, install, alter, improve, remove, or demolish, any structure located over, on, into, or adjacent to any Town waterway. As defined in § 42-4, regulated structures include, but are not limited to, docks, piers, bulkheads, floats, permanently moored vessels, and aids to navigation.

⁷⁵ United States Army Corps of Engineers New York District. List of Navigable Waters for Nassau County. Available at: https://www.nan.usace.army.mil/Portals/37/docs/regulatory/NW%20List%20NY%20Counties/Nassau.pdf Accessed August 2021.

Figure 3-10: National Wetlands Inventory



West Shore Residences 145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



National Wetlands Inventory Classification

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Source: National Wetlands Inventory

Figure 3-11: NYSDEC Tidal Wetlands

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Subject Property

Littoral Zone Boundary

Littoral Zone Tidal Wetlands: The tidal wetland zone that includes all lands under tidal waters which are not included in any other category, extending seaward from shore to a depth of six feet at mean low water (NYSDEC).



3.4.3 Potential Impacts

3.4.3.1 Terrestrial Habitats, Flora, and Fauna

Implementation of the Proposed Action would result in the demolition/removal of the existing site features and limited vegetation at the terrestrial portions of the Subject Property. Due to impervious or otherwise largely unvegetated surfaces and disturbed conditions, the buildings, pavement, construction supply stockpiles, dilapidated shoreline structures, and the concrete platform within Hempstead Harbor that encompass the terrestrial areas of the Subject Property have poor habitat functional value. The site features are further designated by the NYNHP as unranked cultural communities, due to their artificial origin, disturbed/developed conditions, and wide distribution throughout New York State. Moreover, the limited areas of existing vegetation at the Subject Property are composed of a low diversity flora dominated by a number of non-native/invasive species. As a result, the Subject Property does not represent a significant source of vegetated habitat or native plant diversity. Taking these factors into account, no significant adverse impacts to local or regional ecological communities or plant species are anticipated due to removal of the existing site features and limited vegetation.

Implementation of the Proposed Action would result in a reduction in impervious surfaces at the Subject Property of nearly one acre (0.93± acre), while vegetated (lawn/landscaping) habitat would increase from 0.25± acre to 0.46± acre. The Proposed Action would further result in the installation of $0.52\pm$ acre of pervious pavers/pavement. As a result, the Proposed Action would transform the terrestrial portions of the Subject Property from a site characterized by disturbed conditions, industrial development, suspected subsurface contamination issues, and largely unvegetated, impervious surfaces to a site developed with a multi-story residential building, with vegetated habitats and significantly less impervious surfaces. Based on the conceptual Landscape Plan (Appendix C), implementation of the Proposed Action would create vegetated conditions at various locations throughout the Subject Property, particularly along perimeter areas, within and surrounding surface parking, and on the proposed public pier. The proposed Landscape Plan includes a representative plant palette of several varieties of native tree, shrub, and herbaceous plant species, including Sweetgum (Liquidambar styraciflua), Tulip Poplar (Liriodendron tulipifera), Arborvitae (Thuja occidentalis), Inkberry (Ilex glabra), and Bee Balm (Monarda didyma). Based on these proposed conditions, the ECNYS communities that would occur at the Subject Property following redevelopment would include the Urban Structure Exterior, Paved Road Path, Mowed Lawn, Mowed Lawn with Trees, and Flower/Herb Garden cultural communities. Accordingly, the overall ecological impact of the Proposed Action on terrestrial habitats and vegetation at the Subject Property would be beneficial, including quantitative and qualitative improvements in vegetated habitat, removal of existing invasive plant species, a significant reduction in impervious surfaces, and remediation of subsurface contamination under the Brownfield or similar cleanup program.

Based on disturbed and largely unvegetated conditions, as well as high levels of human presence and activity, habitat at the terrestrial portions of the Subject Property for most local wildlife species is limited. As a result, the observed and expected terrestrial fauna is similarly limited and composed primarily of bird species adapted to disturbed/developed conditions and human interaction. In analyzing the potential impacts on local and regional fauna due to displacement, it is noteworthy that many factors influence wildlife population densities other than resource availability, including disease, parasites, predation, weather, human disturbances, etc. Therefore, it is very likely that wildlife species populations may already be below the theoretical carrying capacities of the Subject Property due to one or more limiting factors. For example, largely unvegetated conditions and significant levels of disturbance and human activity at the Subject Property are likely limiting factors for most, if not all, local wildlife species.

Notwithstanding the above, under the assumption that resource availability is the only limiting factor affecting wildlife population density, in the short-term, it is anticipated that properties in the general surrounding area of the Subject Property would experience a temporary increase in wildlife (primarily birds) populations during clearing, grading and construction of terrestrial portions of the Proposed Action. Subsequently, it is anticipated that inter- and intra-specific competition for available resources within these surrounding habitats would result in a net decrease in local population size for most species, until equilibrium between wildlife populations and available resources is achieved. Given the already limited availability of viable wildlife habitat at the terrestrial portions of the Subject Property, the number of displaced individuals from affected species is expected to be low, and the overall impacts on resource availability and local species population sizes are expected to minimal in nature.

Following construction, it is anticipated that most resident wildlife species would reoccupy the Subject Property. Due to the quantitative and qualitative improvements of available vegetated habitat, population densities for most resident avian species would likely increase. Overall, it is anticipated that a similar faunal assemblage of birds and other local wildlife adapted to cultural communities and human presence would occupy the terrestrial portions of the Subject Property following construction, but at increased population densities. It is further anticipated that the availability of new, higher quality vegetated habitat may attract birds and other local wildlife species that currently do not occur on-site. Based on the foregoing, construction impacts to local wildlife populations are expected to be minimal and temporary, and, following construction, beneficial impacts to local wildlife species are anticipated through improved habitat quantity and quality.

With respect to the potential for bird collisions resulting from the Proposed Project consisting of five residential stories above two parking levels (including one that is partially underground), it is a commonly held belief that high-rise buildings (i.e., buildings of three or more stories, as defined by the United States Fish and Wildlife Service [USFWS]) pose the greatest collision threat to birds. However, according to USFWS survey data, less than one percent of bird collision mortality in the United States occurs at high-rise buildings, with the remaining 99+ percent occurring at low-rise buildings (i.e., buildings of fewer than three stories, including residential dwellings).⁷⁶ As a result, the ground level and lower few stories of buildings from zero-to-60 feet above grade are known as the "Bird-Building Collison Zone" because they represent the greatest statistical hazard for birds. The potential for bird collisions with buildings of any height can be significantly reduced through incorporation of various structural and non-structural measures into building design and operations, as

⁷⁶ United States Fish and Wildlife Service Migratory Bird Program. Buildings and Glass. Available at: https://www.fws.gov/birds/birdenthusiasts/threats-to-birds/collisions/buildings-and-glass.php. Accessed August 2021.

described in guidance documents published by the USFWS,⁷⁷ American Bird Conservancy/New York City Audubon,⁷⁸ and the San Francisco Planning Department.⁷⁹ The guidance documents detail various recognized and effective bird safety best management practices (BMPs) with respect to exterior glass surfaces, lighting design and operation, and landscaping design that will be considered by the Applicant during the planning and design phase for the Proposed Project. Common BMPs for exterior glass surfaces include, but are not limited to, installation of external screens or netting over exterior glass building surfaces, use of fritted (patterned) glass, ultraviolet films or coverings for exterior glass, and other methods that reduce the reflective and transparent qualities of glass.

With respect to lighting design, common BMPs include avoidance of unnecessary perimeter lighting, use of light motion sensors, and installation of fully shielded ("dark sky compliant") exterior lighting fixtures that direct light downward. In keeping with these BMPs, as shown on the conceptual Lighting Plan, the proposed exterior lighting fixtures will not exceed 20 feet in height, and all proposed lighting is to be shielded to eliminate direct glare beyond the perimeter of the Subject Property. Lighting operation BMPs include ensuring that all unnecessary interior and exterior lighting is turned off at night, elimination of decorative/vanity lighting during bird migration periods (early-April through late May and mid-August through early November), and installation of window coverings to prevent light spill.

Regarding landscaping, based on the proposed conceptual Landscape Plan, the Proposed Action incorporates landscape design BMPs to reduce the potential for bird collisions, including the minimization of foundation plantings or other plantings located in close proximity to building exteriors, as well as avoidance of "funneling effects" (i.e., landscaping designs that tend to funnel birds towards building exteriors).

As noted in Existing Conditions, as a USFWS candidate species, Monarch Butterfly is under consideration for listing under the Endangered Species Act, but currently is not afforded statutory protection under the Act. Currently, due to disturbed and largely unvegetated conditions, the Subject Property is not a significant source of vegetated habitat and therefore does not provide significant breeding or feeding opportunities for Monarch Butterfly. However, as the proposed Landscape Plan includes a representative plant palette that includes a number of flowering native tree, shrub, and herbaceous plant species, available feeding habitat for Monarch Butterfly would improve as compared to existing conditions, resulting in a net benefit for this species. It is further noted that the potential inclusion of plants from the Milkweed (*Asclepias*) genus in the Landscape Plan would create potential breeding habitat for Monarch Butterfly at the Subject Property.

3.4.3.2 Wetland Habitats, Flora, and Fauna

As noted in **Section 3.4.2**, pending NYSDEC confirmation through a jurisdictional determination or the issuance of a tidal wetlands permit for regulated activities for the Subject Property, the limits of the NYSDEC's tidal wetland jurisdiction under 6 NYCRR § 661 includes the tidal wetlands of Hempstead Harbor, as well as the adjacent upland areas

⁷⁷ United States Fish and Wildlife Service Division of Migratory Bird Management. 2016. *Reducing Bird Collisions with Buildings and Building Glass – Best Practices*

⁷⁸ American Bird Conservancy/New York City Audubon. 2018. *Bird-Friendly Building Design*.

⁷⁹ San Francisco Planning Department. 2011. Standards for Bird-Safe Buildings – Public Review Draft.

located seaward of the 10-foot amsl contour at the Subject Property. NYSDEC regulations and permitting would apply for any regulated land use or activity within the limits of the NYSDEC's tidal wetland jurisdiction. Additionally, as Hempstead Harbor is subject to USACE regulation under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899, permits would be required for various activities that occur seaward of mean high water (and in some case, spring high water), including dredging, placement of fill, construction of docks, bulkheads, and other in-water structures, and other regulated uses.

The Proposed Action includes the following proposed activities within the NYSDEC and USACE jurisdictional areas associated with Hempstead Harbor:

- Demolition/removal of existing shoreline bulkheads and the dilapidated remains of piers (timber piles to be cut at the mean low water elevation), a steel dry dock, sunken vessels, and other in-water structures and debris.
- The existing dilapidated 27,980± SF earth-filled pier (shown on the Rising Tide Marina Layout Plan Sheet IL-1 as "earth-filled pier") that extends eastward from the Subject Property into Hempstead Harbor will be reduced replaced with new bulkheading, resulting in the creation of a 13,615 SF earth-filled public pier with a perimeter bulkhead at the same location, thereby expanding the tidal wetland area in the vicinity of the pier by 14,365 SF.
- > Dredging of 72,185± SF (1,195± CY) portion of the tidal area to a depth of four feet below mean low water (with one foot of over dredge).
- > Installation of new shoreline bulkheads, resulting in the net placement of 7,665 SF of fill within the tidal wetlands.
- > Construction of a 20-30-slip marina consisting of a fixed timber pile pier, docks, platforms, and of wave screens totaling 8,515 SF of surface coverage over tidal areas.

In total, the Proposed Action would result in the placement of 7,665 SF of fill and the removal of 14,596 SF of fill below the plane mean high water, resulting in a net expansion of 6,931 SF of tidal wetland area.

As the work activities described above would occur within NYSDEC jurisdiction, an NYSDEC Article 25 Tidal Wetlands Permit, Article 15, Title 5 Protection of Waters Permit, and a Section 401 Water Quality Certification would be required. Regarding federal jurisdiction and permits, a USACE Section 404 Clean Water Act/Section 10 Rivers and Harbors Act Permit would also be required for the proposed work within regulated areas.

Temporary impacts to Hempstead Harbor wetland habitats during the proposed construction activities detailed above would include benthic and water column disturbance within the in-water work areas at the Subject Property. Potential disturbance to tidal habitats located farther afield within Hempstead Harbor may also occur, due to water column turbidity, benthic siltation, and noise/vibration impacts from pile installation and other construction activities. To avoid or minimize the potential for adverse impacts to wetland habitats and fauna within Hempstead Harbor, all work, including structure demolition/removal, dredging, and bulkhead/pier/dock installation would be conducted according to industry BMPs designed to protect natural resources. Significantly, as noted previously, the proposed work activities are subject to regulation and permitting by the NYSDEC and the USACE, which are the New York State and federal agencies, respectively, that are charged with protecting and, where possible, improving, wetland and aquatic

resources, including Hempstead Harbor. As such, the proposed waterfront improvements and work activities would be subject to the conditions, regulations, and prohibitions for the protection of wetlands and natural resources included in the required NYSDEC and USACE permits for the Proposed Action. Accordingly, the following expected avoidance, minimization, and mitigations measures have proactively incorporated into the project design to protect wetland and aquatic resources:

- > The use of silt curtains, turbidity booms, and other in-water measures to avoid or minimize turbidity and siltation impacts to water column and benthic habitats located within and beyond in-water work areas.
- > Restrictions on the use of wood preservatives for bulkheads, docks, wave screens, and other proposed in-water structures.
- Requirements for dredging BMPs, including the use of closed bucket or hydraulic dredging equipment, prohibitions against dragline dredging, side-casting, or temporary storage of dredge sediments, requirements for the establishment of a uniform postdredge bottom surface, restrictions for barge or other dredge sediment transport vessel/vehicle overflow, requirements for the placement, dewatering and storage of dredge sediments, and other dredging operation BMPs.
- > Restriction of dredging operations to approved seasonal dredging windows.
- > Excavation and stabilization of backfilled soils located landward of existing bulkheads and other existing shoreline structures prior to the removal of the structures.
- > Containment of stockpiled soils with silt fencing, straw bale enclosures, tarps, and other approved methods.
- > The use of protected and stabilized upland storage areas for materials and equipment.
- Pursuant to the NYSDEC General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001), the SWPPP for the Proposed Action would include installation and maintenance of erosion and siltation controls at upland portions of the Subject Property during all project work, including silt fence barriers, strawbale dikes, inlet protection, soil stockpile stabilization, stabilized construction entrances/exits, and other approved methods to prevent impacts to the adjacent wetland resources. All erosion and siltation control methods would be installed and maintained pursuant to the NYSDEC-approved SWPPP and the New York State Standards and Specifications for Erosion and Sediment Control (2016).
- > Pursuant to Section 401 Water Quality Certification requirements, compliance with Sections 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act, which establish effluent guidelines and discharge standards for regulated waters.
- Pursuant to Section 401 Water Quality Certification requirements, compliance with the applicable New York State Water Quality Standards, including, but not limited to, standards for effluent limitations, best usages, and thermal discharge criteria, as set forth in 6 NYCRR § 701 through § 704.

Regarding the observed and expected fish and wildlife fauna of the tidal waters of the Subject Property and adjoining portions of Hempstead Harbor, the BMPs and other proactive protection measures detailed above have been designed to avoid or minimize potential adverse impacts to resident species during construction operations, including the New York State- and federally listed species known to occur within Hempstead Harbor and the vicinity of the Subject Property. The Proposed Action will further comply with any additional NYSDEC and/or USACE avoidance and minimization measures that may be included as conditions of the respective agency permits. Similarly, the BMPs and other proactive protection measures detailed above have been designed to avoid or minimize potential adverse impacts to Essential Fish Habitat finfish and their prey species. Accordingly, a site-specific Essential Fish Habitat assessment detailing existing habitat conditions, potential impacts, and the aforementioned avoidance and minimization measure to protect the 14 Essential Fish Habitat finfish species listed for Hempstead Harbor will be submitted to the USACE and the NOAA NMFS for review and comment. Upon review of the Essential Fish Habitat assessment, the NMFS may impose additional measures to protect some or all of the 14 identified finfish species within Hempstead Harbor, as well as the endangered and threatened marine species identified as potentially occurring within Hempstead Harbor (Atlantic Sturgeon, Shortnose Sturgeon, and four sea turtle species).

With respect to permanent impacts to wetlands habitats and resident fauna of the Subject Property and Hempstead Harbor, the primary impact of the Proposed Action would be a net increase in tidal wetland habitat. In total, the Proposed Action would result in the placement of 7,665 SF of fill and the removal of 14,596 SF of fill below the plane of mean high water, resulting in a net expansion of 6,931 SF of tidal wetland area. The increase in tidal wetlands will occur primarily as a result of removal of the existing 27,980± SF earth-filled pier that extends eastward from the Subject Property into Hempstead Harbor and replacement with a 13,615 SF earth-filled public pier with a perimeter bulkhead at the same location, thereby expanding the tidal wetland area in the vicinity of the pier by 14,365 SF. The mitigation achieved by the overall 6,931-SF expansion of the tidal area is designed to offset projectrelated impacts to wetlands, including the temporary construction impacts described previously and potential shading impacts caused by the installation of the proposed marina, as described below.

It is important to note that NYSDEC policies for permit issuance and acceptable forms of mitigation require that regulated activities are compatible with wetland habitats and will provide net benefits to wetlands. Pursuant to 6 NYCRR § 661.9(b)(1)(v) (Standards for Permits on any Tidal Wetland):

If a proposed regulated activity is a presumptively incompatible use under such section, there shall be a presumption that the proposed regulated activity may not be undertaken in the subject area because it is not compatible with the area involved or with the preservation, protection or enhancement of the present or potential values of tidal wetlands if undertaken in that area. The applicant shall have the burden of overcoming such presumption and demonstrating that the proposed activity will be compatible with the area involved and with the preservation, protection and enhancement of the present and potential values of tidal wetlands...

The proposed 6,931-SF expansion of tidal wetlands, as well as the proposed removal of existing dilapidated structures and debris from the Subject Property wetland area, as well as remediation of subsurface contamination of adjacent upland areas under the Brownfield or similar cleanup program, would appear to satisfy the above-referenced NYSDEC policies, as these mitigation actions would provide for the preservation, protection, and enhancement of the present and potential values of tidal wetlands.

With respect to USACE guidelines for permit issuance, as it is the official policy of the federal government that there shall be "no net loss" of wetlands as a result of development or other activities,⁸⁰ the 6,931-SF expansion of regulated waters of the United States means that the Proposed Action would achieve compliance with this policy and that, subject to USACE concurrence, any unavoidable adverse impacts to waters of the United States would be fully mitigated.

Pursuant to the Town of North Hempstead Town Code § 70-2 (B) (Public Waterways; Structures), it is the legislative intent of the Town to "prevent the degradation of marine ecosystems that may be caused by the improper construction and placement of structures and bulkheads in waterways." Accordingly, the Town regulates and requires permits for structures located in, over, or adjacent to any Town waterway, including docks, piers, bulkheads, floats, permanently moored vessels, and aids to navigation. As such, the proposed marina, public pier, and bulkheads of Proposed Action would be proactively designed to comply with all applicable Town requirements and conditions intended for the protection of the wetlands and surface waters of Hempstead Harbor, and all applicable Town permits for same will be obtained.

As detailed in Section 3.10, the shadows assessment performed for the Proposed Project indicates that Hempstead Harbor would receive incremental shadows (i.e., shadows that do not occur under existing conditions but would occur as a result of the Proposed Action) during portions of all three representative analysis days. However, incremental shading during the spring and summer seasons when biological activity, essential behaviors, and life stages of resident species within Hempstead Harbor are at peak levels would be limited in temporal and areal extent and confined primarily to nearshore portions of the Subject Property. Similarly, due to the limited extent of incremental shading, as well as tidal currents that would continue to move macroalgae, microalgae, and other natural elements through the incrementally shaded area, significant adverse impacts to primary productivity within Hempstead Harbor are not anticipated. Moreover, vegetated tidal wetlands do not occur at the Subject Property, and the subtidal waters of the Subject Property are not known to support eel grass or significant occurrences of other submerged aquatic vegetation that might otherwise be impacted by shadows. Based on the foregoing, although some resident species might experience limited and temporary effects, no significant adverse impacts to Hempstead Harbor habitats, flora or fauna are anticipated due to incremental shading from the Proposed Project.

Additional shading impacts to wetland habitats and fauna that are not examined in the shadows assessment would occur due to water column and benthic habitat shading resulting from installation of the fixed timber pier, floating docks, and platforms comprising the proposed marina, resulting in 8,515 SF of surface coverage over tidal areas. However, it is important to note that the Proposed Action proactively incorporates measures designed to minimize potential adverse impacts to wetlands from shading, including minimizing dock widths and incorporating light penetrating decking material, where feasible. The Proposed Action would further comply with all NYSDEC and USACE permitting requirements to limit shading impacts to Hempstead Harbor habitats and fauna.

⁸⁰ United States Department of Agriculture National Resource Conservation Service. Wetlands. Available at: <u>https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/water/wetlands/</u> Accessed September 2, 2021.

To minimize the potential for adverse impacts to wetland habitats and fauna due to stormwater runoff, the Proposed Action would reduce impervious surfaces (and, therefore, associated stormwater runoff) at the Subject Property by nearly one acre, with a corresponding increase in vegetated habitats, pervious pavement, and other pervious surfaces. Moreover, as described **Section 3.3**, no stormwater management infrastructure currently exists at the Subject Property, and untreated stormwater runoff carrying sediments and pollutants drains directly to Hempstead Harbor along the waterfront. The proposed stormwater management practices at the Subject Property would comply with all NYSDEC requirements for protection of wetland and aquatic resources, as well as the provisions pertaining to stormwater management in Chapter 46A of the Town Code, resulting in water quality improvements to Hempstead Harbor.

The proposed marina with a capacity to provide dockage for 20-30 recreational vessels (potentially including an emergency service vessel slip) would increase recreational boat usage and traffic within Hempstead Harbor. The operation of recreational vessels moored at the proposed marina would comply with all applicable Town of North Hempstead, Nassau County, and New York State regulations and restrictions in place to avoid or minimize impacts to wetland habitats and fauna, enhance public safety, and avoid property damage. Significantly, in 2008, Hempstead Harbor was designated as a No Discharge Zone, making it is illegal to discharge treated or untreated sewage from boats within the harbor. Boaters within Hempstead Harbor and other No Discharge Zones are required to dispose of sewage at pump-out stations available at many marinas. Moreover, the marina would not include fuel pumps, thereby avoiding potential adverse impacts to Hempstead Harbor associated with fuel pumps spills.

3.4.3.3 Summary and Conclusions

The Proposed Action would result in the demolition/removal of the existing disturbed and largely unvegetated terrestrial development at the Subject Property, which provides poor habitat functional value, supports limited wildlife, and is composed of habitats that are designated by the NYNHP as unranked cultural communities. Taking these factors into account, no significant adverse impacts to local or regional plant species, ecological communities, or wildlife populations are anticipated due to removal of the existing site features and limited vegetation. The existing development would be replaced with vegetated and developed habitats, resulting in a significant increase in vegetated area and a nearly one-acre reduction in impervious surfaces at the Subject Property. As such, the primary impacts of the Proposed Action on terrestrial vegetation, habitats, and wildlife at the Subject Property would be beneficial, including quantitative and qualitative improvements in vegetated habitat, removal of existing invasive plant species, increased wildlife population density and diversity, and a significant reduction in impervious surfaces.

Temporary disturbance to wetland habitats and resident fauna at the Subject Property will occur during in-water work of the construction phase of the Proposed Action. The proposed work would be conducted according to industry BMPs, avoidance, and minimization measures designed to protect natural resources and would occur within the jurisdiction of New York State and federal agencies charged with protecting wetland and aquatic resources and resident fauna, including the NYSDEC, USACE, USFWS, and NMFS. Therefore, the proposed work activities would further comply with regulatory agency conditions, regulations, and prohibitions to protect natural resources, as well avoidance, minimization,

and mitigation measures to protect and improve wetland habitats and conditions for resident fauna within Hempstead Harbor.

Permanent impacts of the Proposed Action include a net increase 6,931 SF of tidal wetland habitat within Hempstead Harbor, well as the removal of existing dilapidated structures and debris from wetlands, thereby complying with NYSDEC and federal policies for expansion and improvement of wetland habitats. Shading of wetland habitats from the Proposed Building would be limited in temporal and areal extent and would occur primarily during the winter season, when biological activity and essential behaviors of most resident fauna and organisms is lowest. Shading impacts to water column and benthic habitats from the proposed marina pier would be minimized through design measures to minimize impacts and compliance with NYSDEC and USACE permitting conditions. The Proposed Action would reduce impervious surfaces and associated stormwater runoff at the Subject Property by nearly one acre. Moreover, the Proposed Action would result in the installation of stormwater management infrastructure at the Subject Property, in compliance with all New York State and local requirements for protection of wetland and aquatic resources. Water guality improvements within Hempstead Harbor are expected as a result. The Proposed Action further incorporates landscape and lighting design BMPs to reduce the potential for bird collisions with built structures.

Overall, no significant adverse impacts to ecological resources are anticipated as a result of the Proposed Action, and quantitative and qualitative improvements to terrestrial and wetland ecological resources are anticipated.

3.4.4 Proposed Mitigation

Based on the foregoing, although no significant adverse impacts to ecological resources are anticipated, implementation of the Proposed Action would include the following improvements to ecological resources.

- A net expansion of 6,931 SF of tidal wetland area would occur as a result of the Proposed Action. The creation of new tidal wetlands will occur primarily through removal of the existing 27,980±-SF earth-filled pier that extends eastward from the Subject Property into Hempstead Harbor and replacement with a significantly smaller, 13,615 SF, earth-filled public pier at the same location. The existing 27,980± SF earth-filled pier that extends eastward from the Subject Property into Hempstead Harbor will be replaced by a 13,615 SF earth-filled public pier with a perimeter bulkhead at the same location, thereby expanding the tidal wetland area in the vicinity of the pier by 14,365 SF. The expansion of wetland area will improve the wetland functional benefits of Hempstead Harbor, in keeping with New York State and federal policies to increase the quantity and improve the quality of wetlands.
- Demolition/removal of existing shoreline bulkheads and the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris will substantially improve wetland habitat quality at the Subject Property and within Hempstead Harbor as a whole.
- Remediation of subsurface contamination at terrestrial portions of the Subject Property under the Brownfield or similar cleanup program would improve upland habitat

conditions, while eliminating a potential source of harmful contamination to the wetlands and surface water habitats of Hempstead Harbor

- Vegetated (lawn/landscaping) habitat at the Subject Property would increase from 0.25± acre to 0.46± acre, and would include native tree, shrub, and herbaceous plant varieties, thereby improving the quantity and quality of vegetation and associated wildlife habitat potential.
- > As the proposed Landscape Plan includes a representative plant palette that includes a number of flowering native tree, shrub, and herbaceous plant species, available feeding habitat for Monarch Butterfly would improve as compared to existing conditions, resulting in a net benefit for this species. It is further noted that the potential inclusion of plants from the Milkweed (*Asclepias*) genus in the Landscape Plan would create potential breeding habitat for Monarch Butterfly at the Subject Property.
- > As the existing terrestrial flora of the Subject Property is dominated by nonnative/invasive plant species, the Subject Property currently serves as a source for the spread of harmful plant species to properties within the general surrounding area. The removal of the existing non-native/invasive vegetation and installation of non-invasive species will prevent further spread of invasive plant species from the Subject Property to neighboring properties.
- > The Proposed Action would result in a reduction in impervious surfaces at the Subject Property of nearly one acre (0.93± acre).
- No stormwater management infrastructure currently exists at the Subject Property and untreated stormwater runoff carrying sediments and pollutants drains directly to Hempstead Harbor along the waterfront of the Subject Property. The proposed stormwater management practices at the Subject Property would comply with all NYSDEC and local requirements for protection of wetland and aquatic resources, resulting in water quality improvements within Hempstead Harbor.
- > Mussel beds will be created to help filter out excess nitrogen from stormwater runoff, harmful algae, and bacteria from the harbor.

3.5 Zoning, Land Use, and Community Character

3.5.1 Regulatory Framework

The applicable zoning regulations of the Town of North Hempstead, the overall Town Code, and pertinent adopted land use plans and similar documents, including the *North Hempstead Beach Park Master Plan, Shared Vision Plan for Port Washington, Harbor Management Plan for Hempstead Harbor, 1998 Nassau County Comprehensive Master Plan* and the *Nassau County Comprehensive Plan Update 2008: Trend Analysis* serve as the regulatory framework for this section. Additionally, Town Resolution No, 454-2008 identifies future Town of North Hempstead intentions for Section 6, Block 53, Lot 1035.

3.5.2 Existing Conditions

3.5.2.1 Land Use and Zoning

The 7.17±-acre Subject Property currently consists of a sand and gravel storage facility. This industrial property contains one concrete one-story building and one masonry storage building as well as large piles of sand and gravel with associated machinery. The Subject Property consists of approximately 2.69 acres above mean high water (MHW) (terrestrial portion) and 4.48 acres below MHW (aquatic portion). An existing, dilapidated wooden pier and steel dry dock extend out into the water within the bounds of the Subject Property.

The terrestrial portion of the Subject Property (approximately one third of the Subject Property) mostly consists of impervious surfaces. The existing coverages for the Subject Property are outlined in **Table 3-10**, below.

Type of Coverage	Acreage (Percent)
Impervious (roads, buildings and other paved surfaces)	2.36± (32.9%)
Non-vegetated (bare rock, earth or fill)	0.08± (1.1%)
Wetlands	4.48± (62.5%)
Lawn and Landscaping	0.25± (3.5%)
Total	7.17± (100.0%)

Table 3-10 Existing Site Coverage

The Subject Property is located within the Town of North Hempstead Residence AAA District (R-AAA). Therefore, the existing use as an industrial facility does not conform to the prevailing zoning of the site. **Figure 3-12** provides the zoning classifications of the Subject Property, and parcels located within a one-and-a-half-mile radius of the site (the "Study Area"). Specifically, as depicted in **Figure 3-12**, the Study Area loosely consists of an area north of the Subject Property to Beacon Hill Road to Main Street to the Port Washington Train Station, south to approximately the Nassau Knolls Cemetery, southeast towards Woodland Road to Northern Boulevard and north to the Subject Property along West Shore Road. As per the Final Scope, the primary Study Area is supplemented by a secondary Study Area which include the business district of the Village of Roslyn and the waterfront of Port Washington along Main Street. This larger secondary Study Area is applied in the analysis of community character and aesthetic impacts under the Proposed Action. The dimensional requirements of the R-AAA zoning district are presented in **Table 3-11** and the permitted uses within same are discussed below.

Figure 3-12: Surrounding Area Zoning

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Zoning

- Village of Flower Hill Municipal and Public Area (M-1)
- Village of Flower Hill Residence R-1
- Village of Flower Hill Residence R-3
- Village of Flower Hill Residence R-4
- Village of Flower Hill Residence R-5
- Village of Flower Hill Residence R-7
- Village of Flower Hill Residence R-8
 - Village of Roslyn Waterfront Mixed-Use District (W-MU)
 - Town of North Hempstead Industrial B (I-B)

- Town of North Hempstead Business A (B-A)
- Town of North Hempstead Residence A (R-A)
- Town of North Hempstead Residence AAA (R-AAA)
- Town of North Hempstead Residence B (R-B)



Town of North Hempstead Residence C (R-C)



- Town of North Hempstead Transportation (T)
- Town of North Hempstead Modified Planned Industrial Park District (MPIP)



- Town of North Hempstead Planned Industrial Park District (PIP)
- Town of North Hempstead Planned Unit Development Senior Residential Community (PUD-SRC)
- Town of North Hempstead Planned Unit Development Golf and Recreational (PUD-GRR)
- Town of North Hempstead Planned Unit Development Commercial Recreation (PUD-CR)
- Town of North Hempstead Planned Unit Development Nature Preserve (PUD-NP)
- Town of North Hempstead Planned Unit Development Planned Unit Development Public and Community Facility (PCF)

A

Source: ESR; Incorporated Village of Flower Hill Zoning Map; Planning Department Town of North Hempstead Zoning 4-6; Village of Roslyn Zoning Map

^svhb.

Dimension	Requirements	
Maximum Height		
Single Family	2.5 stories/30 feet	
Other buildings	3 stories/45 feet	
Minimum Plot Area	20,000 square feet	
Minimum Lot Width	125 feet	
Maximum Lot Coverage	15%	
Minimum Floor Area	1,700 square feet	
Minimum Front Yard	40 feet	
Maximum Front Yard Paving	30%	
Minimum Side Yards		
Interior Lot	35% of the width of the lot or 20 feet	
Corner Lot	20 feet	
Minimum Rear Yard	25 feet for all buildings 35 feet or less in height	
	Buildings over 35 feet in height, the depth of the rear yard shall be not less than 30 feet	
Parking Requirements	one space per each 1/2 dwelling unit	

Table 3-11 Bulk and Dimensional Requirements of the R-AAA Zoning District

As per the Town Code, the R-AAA zoning district permits the following uses:

- > Single-family detached dwelling
- > Church or other building uses exclusively for religious purposes
- > Agricultural, provided there is no display of harvested products for sale and no advertising on the premises
- > Accessory use on the same lot and customarily incidental to any of the above permitted uses
- > Private garage, detached or attached or within the main building
- > Professional office of a doctor, dentist, lawyer, teacher, artist, architect, engineer, accountant, ophthalmic dispenser or musician, provided that the office is located in the dwelling in which said professional person resides
- > Outdoor pool
- A caretaker unit, located within a building or on a property designated on the National Register of Historic Places, State Register of Historic Places or designated as an individual landmark under Chapter 27 of the Town Code and having a portion of the building accessible to the public.

3.5.2.2 Surrounding Area

Land use and zoning in the areas surrounding the Subject Property (which is located along Hempstead Harbor) consist of the following: commercial, industrial, open space/recreational, single-family residential, and multi-family residential, as depicted in **Figure 3-13**. The land

uses and zoning districts present in the areas surrounding the Subject Property within the one-and-a-half-mile primary Study Area are depicted in **Figure 3-13** and **Figure 3-12**, respectively. Conditions of the Subject Property at the time of the land use survey are depicted in **Photo 3-1** through **Photo 3-7**, and a photograph key map is provided in **Figure 3-14**, below. **Photo 3-8** through **Photo 3-22** represents surrounding uses within the Study Area.

Along the West Shore Road corridor, there is an abrupt transition from the industrial uses of the Subject Property and the adjacent property to the south, North Hempstead Beach Park. The west side of West Shore Road is primarily wooded. The use directly west of the Subject Property beyond the wooded road frontage consists of the Town of North Hempstead Aerodrome. The Aerodrome is open to constituents of the Town, through membership, who are able to utilize the park to fly radio-controlled model aircraft. Further south of the Aerodrome is the Harbor Links Golf Course and Harbor Links Athletic Fields, as well as the Sandminers Monument Park.

On the east side of West Shore Road, directly north of the Subject Property is an industrial use, a supplier of crushed stone. This facility has an entrance from West Shore Road allowing trucks to access the property and a dock to allow for access to the waterway for barges. Directly south of the Subject Property, on the east side of the roadway, is North Hempstead Beach Park. North Hempstead Beach Park is a beach and recreational park situated between Hempstead Harbor and West Shore Road, consisting of a fishing pier, boat ramp, bathhouse and concession area, athletic courts and fields, horseshoe pits, picnic areas, a playground and trails. The North Hempstead Beach Park is only accessible to Nassau County residents.

In mid-2021, a new 48-unit multi-family development called The Residences at Glen Harbor opened for occupancy. The Residences at Glen Harbor is situated on a five-acre property on the east side of Hempstead Harbor, approximately 1.25 miles southeast of the Subject Property. The multi-family development is located at 10 Shore Road, Glenwood Landing, NY 11547. Prior to site plan approval, the land had undergone a change of zone (from industrial to multiple residence).

Figure 3-13: Surrounding Area Land Uses



Southern Land PW/Project/SiteLocation/SiteLocation.aprx (ckastalek

Path: \\vhb.com\gis\proj\Hauppauge\20528.00

West Shore Residences 145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Figure 3-14: Land Use Photograph Locations

West Shore Residences

145 West Shore Road, hamlet of Port Washington Town of North Hempstead, Nassau County, New York



Source: Source list here...can be 2 lines if needed with sources separated by commas or semi-colons.



View of the Subject Property, facing east.

Photo 3-3

Photo 3-2



View of the interior of the Subject Property.

Photo 3-4



View of the interior of the Subject Property.



View of the dilapidated steel dry dock and remaining piles One-story building on the Subject Property. of the former timber pier, facing south.



Representative view of the dock used in association with the gravel and sand storage, facing south.



Photo 3-5



View of the Subject Property from the adjacent North Hempstead Beach Park, facing north.

View of Hempstead Harbor, adjacent to the east of the Subject Property.



View of the Town of North Hempstead's Aerodrome, on the west side of West Shore Road, facing west.



West Shore Road facing southeast.

Photo 3-12

Photo 3-8

Photo 3-10



View of the adjacent driveway connecting the Subject Property to the North Hempstead Beach Park.

Photo 3-9



West Shore Road facing north.



View of the Beacon Hill Bungalow Colony located to the north of the Subject Property, facing northeast.

Photo 3-14

Photo 3-16



North Hempstead Beach Park, facing southeast.

Photo 3-15



Harbor Park industrial park located along West Shore Road, facing southwest.



Single-family residences within the Beacon Hill Residential Area, facing southeast.

Photo 3-17



Single-family residences within the Beacon Hill Residential Area, facing southeast.



View of the six-story, Amsterdam at Harborside multifamily residential development, facing northeast.



View of commercial uses along Port Washington Boulevard, facing northeast.

Photo 3-20



View of commercial uses along Main Street in Port Washington, facing northwest.



Commercial uses along Main Street in Port Washington, facing northeast.

Photo 3-22



Port Washington Long Island Rail Road Station, facing southeast.

- **North**: The areas located north of the Subject Property include the R-AAA and Planned Waterfront Residential Community (PWRC) zoning districts of the Town of North Hempstead. Land use within these areas consist of an active asphalt mixing industrial use along with single-family residences further north. The area to the northeast includes Hempstead Harbor and open space/recreational further northeast.
- South: Directly south of the Subject Property zoning is R-AAA. The area southwest of the Subject Property is zoned Planned Unit Development District (PUD) (PUD-Senior Residential Community [SRC], PUD-Nature Preserve [NP], PUD-Commercial Recreation [CR], PUD-Public and Community Facility [PCF], PUD-Golf and Recreational [GRR]), Business A District (B-A), Residence B District (R-B), Parking District (P), R-AAA, Modified Planned Industrial Park District (MPIP) and Planned Industrial Park District (PIP) of the Town of North Hempstead. Land uses within these areas include open space/recreation, commercial, industrial, transportation

(parking) and single-family residential. Southeast of the Subject Property is Hempstead Harbor.

- **East**: Directly east of the Subject Property is Hempstead Harbor. The east side of Hempstead Harbor consists of the Town of Oyster Bay's Harry Tappen Beach and Glenwood Landing Marina with single-family, recreational, and commercial uses beyond.
- West: West of the Subject Property is zoned as R-AAA and PUD-GRR with R-A, B-A, Residence C District (R-C), Industrial B District (I-B), P, and Business B District (B-B) further west. Land uses directly west include open space/recreational, singlefamily residences, institutional, commercial, and transportation uses.

3.5.2.3 Community Character

According to NYSDEC's *The SEQR Handbook, 4th Edition—2020* (the SEQR Handbook), "community character" relates not only to the built and natural environments of a community, but also to how people function within, and perceive, that community. Evaluation of potential impacts upon community or neighborhood character is often difficult to define by quantitative measures.

The Subject Property has a history as an active industrial property within an industrial and recreational corridor. As previously indicated, the 7.17±-acre site consists of an active industrial use containing gravel and sand storage as well as several dilapidated buildings and piers. The character of the site at the time of the land use survey is depicted **Photo 3-1** through **Photo 3-7**, and a photograph key map is provided in **Figure 3-14**, above. It is similar in appearance and nature to other industrial uses along the waterfront in this area of the Town.

The character of the community in which the Subject Property is located is diverse. While the West Shore Road corridor contains a large number of industrial uses, including the former Town landfill, open space/recreational uses are found along the corridor as well. Additionally, single-family and multi-family residential uses are found along this corridor. North of Northern Boulevard along West Shore Road, there are many features that define the character of this corridor, including views of Hempstead Harbor to the east; the industrial parks and the Town solid waste management facility, Harbor Links Golf Course and athletic fields to the west; and North Hempstead Beach Park to the east. North Hempstead Beach Park is an important use and character feature along West Shore Road. As mentioned above, North Hempstead Beach Park provides shoreline and beach access, trails, sporting facilities, and fields, among other amenities. Moreover, directly west of the Subject Property consists of the Town of North Hempstead Aerodrome, a large open field surrounded in all directions by wooded land.

The industrial uses within the primary Study Area are generally confined to the West Shore Road corridor. The industrial uses within the Study Area consist of primarily one- and twostory, non-descript warehouse, manufacturing, and distribution buildings with tractor trailer traffic within the industrial parks located to the south of the Subject Property. Hours of operations for these industrial uses vary according to the use and dependent need for distribution and delivery. Commercial uses within the primary Study Area are located within the industrial parks as well as along Main Street, Port Washington Boulevard, and roadways located between Main Street to the north, Port Washington Boulevard to the east, Beechwood Avenue to the south, and the Port Washington Long Island Rail Road (LIRR) to the west. These commercial uses consist of office, retail and dining, and hospitality uses. The commercial uses within the primary Study Area are generally one- and two-story buildings with varying architectural features consisting of brick and/or stucco exterior faces, with a few exceptions of more recently renovated and/or constructed buildings/storefronts. Hours of operation for commercial uses within the primary Study Area would generally align with similar commercial areas within Port Washington and the Town.

Residential properties in the immediate area of the Subject Property within the primary Study Area are generally located to the north, west, and southwest of the Subject Property. These predominantly single-family residential neighborhoods vary in lot size and architectural features. North of the Subject Property is a bungalow community, with houses and lot sizes that are generally smaller than other surrounding residential neighborhoods. The residential neighborhoods to the west and southwest contain larger lots with wider setbacks from the roadway and front yard landscaping. Many of these residences are between one and two stories in height and have varying architectural treatments including brick, stone and/or wood facades, as well as attached garages and driveways for off-street parking. The streets in these single-family residential neighborhoods were observed to be relatively low-trafficked with street trees and other curb-side landscaping, contributing to the residential character of the area. Two multi-family residential developments are located within a private community to the southwest of the Subject Property-the Amsterdam at Harborside, containing 329 apartment units, and the HarborView, containing 145 condominium units and 125 single-family residences. Both multi-family residential buildings are six stories in height, with varying facades and landscaping.

A mix of institutional and community facility uses are located within the Study Area, primarily located along Port Washington Boulevard consisting of education facilities, and police and fire departments. A Greek Orthodox Church is located right off West Shore Road, to the south of The Amsterdam.

As previously mentioned, the Subject Property is located directly adjacent to Hempstead Harbor. Hempstead Harbor is used for commercial, industrial, and private boating uses. As the Port Washington Peninsula is surrounded by the Hempstead Harbor to the east with the Town of Oyster Bay's Harry Tappen Beach and Glenwood Landing Marina with single-family, recreational, and commercial uses beyond on the east side of Hempstead Harbor, the Long Island Sound to the north and Manhasset Bay to the west, Hempstead Harbor is a large contributor to the community character in the Study Area and within the Town.

The character of the secondary Study Area is similar to that of the primary Study Area such that these areas are located along waterbodies with a mix of uses including commercial and multi-family residential.

The Village of Roslyn is located at the southern end of Hempstead Harbor, centered on Old Northern Boulevard and Main Street. Buildings along Old Northern Boulevard range from one- and two-story buildings with varying architectural features consisting of brick, stucco, and/or vinyl siding exterior faces with some Victorian style features. Hours of operation for commercial uses within the Village of Roslyn are similar to that of commercial uses within the primary Study Area. Old Northern Boulevard is a well-travelled roadway as the corridor runs parallel to Northern Boulevard, providing connection from surrounding roadways below the viaduct. On-street parking, sidewalks, street trees and other curb-side landscaping contribute to the character of the corridor.

The Manhasset Bay waterfront area centered on lower Main Street in Port Washington is a mixed-use corridor consisting of commercial, open space, and single- and multi-family residential uses. Buildings within this area vary in height such that commercial buildings are typically between one and two stories, with some taller residential buildings up to four stories. Architectural features vary along the roadway consisting of colonial and modern building design as well as other buildings with features consisting of brick and/or stucco exterior faces. Hours of operation for commercial uses within this area are similar to that of commercial uses within the primary Study Area. Main Street within the Manhasset Bay waterfront area is a main thoroughfare providing connection to the north and south. Onstreet parking, sidewalks and street trees contribute to the character of this area. Additionally, waterfront parks and water-dependent uses including a marina contribute to the character of the Manhasset Bay area similar to that of the primary Study Area within the general area of the Subject Property.

Community character also comprises the noise levels and socioeconomic conditions of an area. A description of the ambient noise levels and existing population and socioeconomic characteristics of the surrounding community is included in **Section 3.8** and **Section 3.15** of this DEIS, respectively.

Overall, the Subject Property is located within a mixed-use corridor with industrial, and open space/recreational uses with multi-family and single-family residential uses beyond.

3.5.2.4 Relevant Comprehensive Plans and Studies

The following pertinent land use plans and similar documents have been reviewed:

- > North Hempstead Beach Park Master Plan
- > Shared Vision Plan for Port Washington Peninsula
- > Harbor Management Plan for Hempstead Harbor
- > Town of North Hempstead Master Plan
- > 1998 Nassau County Comprehensive Master Plan
- > Nassau County Comprehensive Plan Update 2008: Trend Analysis.

A summary of these land use and comprehensive plans is provided below.

North Hempstead Beach Park Master Plan Report

According to the North Hempstead Beach Park Master Plan Report, prepared by Quennell Rothschild and Partners, dated June 2019, the purpose of the document was "to determine the best usage of the North Hempstead Beach Park and surrounding areas to meet the diverse recreational needs of the Town's residents, to determine how to best integrate all recreational and undeveloped Town properties within the northeastern portion of the Port Washington Peninsula and to anticipate future storm surge and sea level rise with incorporation of resilient shoreline and park design and sustainable design practices." The document is meant to guide development of the park over the next five years (to 2024). It examined development of the shoreline area as well as the 200-acre natural area (including the 25-acre cleared area, known as the Aerodrome) on the west side of West Shore Road. After review of concept and schematic plan options for the beachfront park and natural areas, a Final Master Plan and a phasing plan were developed. An analysis of the consistency of the Proposed Action with the *North Hempstead Beach Park Master Plan Report* is included in **Section 3.5.3** of this DEIS.

Shared Vision Plan for the Port Washington Peninsula

The Shared Vision Plan for the Port Washington Peninsula, ("Shared Vision Plan") dated June 29, 2005 and prepared by HDR and Sustainable Long Island, was the result of a planning and implementation process that intended to define peninsula-wide goals for a sustainable approach to planning, define current and long-term objectives for the peninsula, help the Town and villages prioritize the allocation of resources, create a planning approach that respects the diverse needs of Port Washington residents and the institutional role of the various governmental entities and create an implementable plan for the Port Washington Peninsula. The information in this document includes both high level and location-specific recommendations for the peninsula.

A discussion of recommendations of the *Shared Vision Plan* and the Proposed Action's consistency therewith is included in **Section 3.5.3** of this DEIS.

Harbor Management Plan for Hempstead Harbor

The Harbor Management Plan for Hempstead Harbor ("HMP") (Cashin Associates, August 2004) was prepared to provide framework for identifying key issues regarding the Hempstead Harbor and formulate recommendations and goals to address those issues while evaluating whether future actions are consistent with the HMP. The guiding principle of the HMP is to provide a mechanism for the various municipalities that share Hempstead Harbor to work together in an effort to address priority issues related to the wise use and protection of the harbor's surface water, natural resources, underwater lands, and shorefront.

An analysis of the consistency of the Proposed Action with the HMP and its guiding framework and goals is included in **Section 3.5.3** of this DEIS.

1989 Town of North Hempstead Master Plan

The Town of North Hempstead Master Plan ("Town Master Plan"), was prepared by the Town of North Hempstead Town Board and published in December 1989. The Town Master Plan was:

...prepared to serve as a policy-oriented, long-range guide to the future physical development of the Town of North Hempstead. It seeks to survey existing conditions with an aim to control the community's growth over the next ten to twenty years. (Page 1)

It is noted that the plan is now over 30 years old, far exceeding the 10—20-year planning and community growth horizon.

The *Town Master Plan* contains various planning methods and techniques, with particular emphasis on their implementation. Issues identified in the Town Master Plan include affordable housing, natural and cultural resource protection, infrastructure capacity, site plan and design concerns, waterfront protection and development, water supply and quality, and day care and institutional needs. The Town Master Plan also outlines goals for each issue,

intended as a statement of what the community "would like to be and what it would like to achieve" (Page 13). Relevant findings and the overall goals from the topics are as follows:

Land Use and Zoning:

The *Town Master Plan*'s Generalized Land Use map depicts the Subject Property in an industrial area immediately surrounded by other industrial and open space. This map also shows the surrounding area containing a mix of low-density residential, transportation/utilities (which appears to be the landfill) and vacant lands.

The major goals outlined in the Land Use and Zoning section of the *Town Master Plan* are as follows.

- > Maintain the small-scale, suburban character of North Hempstead.
- > Preserve open space and protect natural, cultural and historic resources.
- > Ensure that new development on vacant or underdeveloped land is in keeping with existing neighborhood character.
- > Maintain a proper balance between land uses so that the Town's population is adequately served by a sound employment base and sufficient services.

The Environment:

- > Protect the quality of the groundwater supply.
- > Protect the quantity of the groundwater supply through conservation and aquifer recharge.
- > Limit the density and types of development located directly in areas identified as Special Groundwater Protection Areas (SGPA's).
- > Incorporate the elements of a coastal zone management plan in land use decision making.
- > Continue to work with county, regional and state officials on regional environmental issues.
- > Ensure that there will be no net loss in the amount of tidal/freshwater wetlands.
- > Discourage development activities that have significant adverse impacts on air quality.

People and Housing:

According to the *Town Master Plan*, population and housing trends toward smaller households, single-parent families, two-income families, and a general aging of the population, as well as rapid home price escalation, have formed the need for affordable housing in the Town. Therefore, potential affordable housing strategies listed in the *Town Master Plan*, including housing in mixed-use areas and density incentives, could be utilized to provide for a greater affordable housing program. As stated in the *Town Master* Plan, affordable housing through housing in mixed-use areas would reinforce the goal of providing residential development in existing commercial areas, where housing can be a compatible use in retail and office areas. Density incentives, such as density bonuses, utilize zoning to provide expanded housing opportunities in older, established business centers. Used as a successful technique by several communities in the New York Metropolitan area, density bonuses could be provided to developers who guarantee a fixed percentage of units as affordable housing to North Hempstead residents. The major goals outlined in the People and Housing section of the *Town Master Plan* are as follows.

- > Provide an opportunity for the development of housing of various types and sizes, to meet the needs of people at various stages in their lifecycle.
- > Encourage adequate affordable housing opportunities, especially for young families and senior citizens.
- > Encourage mixed-use development where appropriate, such as residential uses within selected commercial/retail zones.
- > Protect residential neighborhoods from commercial, industrial and office encroachment.

Transportation

West Shore Road, on which the Subject Property is located, is shown as a minor arterial on the Town's *Transportation Functional Classifications* map. Arterial roads "function as roads that carry relatively heavy traffic volumes between centers of economic activity and population" (Page 35). West Shore Road is shown as a minor arterial road due to the relative traffic volume it generates, with 12,462± annual average daily traffic (AADT) trips reported by the New York State Department of Transportation (NYSDOT). West Shore Road connects to Northern Boulevard (route 25A) and transitions into Main Street south of route 25A. Main Street provides access to the Northern State Parkway and the Long Island Expressway.

Also, the Town is served by three LIRR lines, including the Port Washington line, the Port Jefferson line, and the Oyster Bay line, with stations in East Williston, Alberton, Roslyn, and Greenvale. The LIRR provides sufficient coverage to North Hempstead, specifically for resident commuters who work outside of the County. LIRR ridership has substantially increased along Port Washington and Port Jefferson lines.

The major goals outlined in the Transportation section of the *Town Master Plan* are as follows.

- > Provide for efficient and safe traffic circulation in the Town of North Hempstead. This should be achieved while the aesthetic quality is maintained especially along residential streets.
- > Optimize alternative modal choices within the Town, in particular for access to the railroad stations. Access modes other than parking at the stations should be encouraged, i.e. buses, jitneys, taxis, walking, etc.
- > Maintain attractiveness of commercial centers by providing convenient parking for shoppers yet minimizing the negative impacts of "sprawling parking lots".

Community Services:

- > The first major goal is to provide adequate public facilities for the Town's population; including schools, parks, libraries, recreation/open space, fire and police, and solid waste disposal.
- > The second major goal is to provide social services adequate to meet the needs of elderly and handicapped residents, as well as the increased need for childcare.
- > The third major goal is to provide a systematic plan for the acquisition of coastal and upland parcels for additional open space and parkland.

The Economy:

The Town of North Hempstead is a desirable business location as it contains many of the most attractive communities on Long Island's North Shore. Residents increasingly depend on jobs within the Town or in adjacent towns. As stated in the *Town Master* Plan, one-third of Town residents are employed in areas directly adjacent to or within the Town. The major goals outlined in the Economy section of the *Town Master Plan* are as follows.

- > The first major goal is to provide adequate roads, water, and power to meet the needs of industry.
- > The second major goal is to ensure that there is sufficient land zoned for commerce and industry to allow for a growing economic base.
- > The third major goal is to encourage businesses to locate in planned office and industrial parks or shopping centers, where access is controlled, and amenities are provided.
- > The fourth major goal is to establish design guidelines to set the example for private developers in site planning, traffic flow and landscaping.
- > The fifth major goal is to preserve and enhance the "Main Street" areas of established business centers.
- > The last major goal is to examine ways to support existing commercial needs, including hotel/conference and back-office space.

Community Areas: Port Washington

The *Town Master Plan* also includes more detailed study and analyses of existing conditions and potential planning and design issues in eight unincorporated community areas throughout North Hempstead, over which the Town Board has direct jurisdiction of planning and zoning matters. The relevant findings of the *Town Master Plan*'s study and analysis for the Port Washington community area are provided below.

The *Master Plan* notes that the Port Washington area is primarily zoned for residential use, with a few key exceptions (e.g., the industrial parks in the southern portion of the area, the solid waste management facility, and retail in the downtown area). The area east of the trin station, between South Bayles Avenue and Port Washington Boulevard is noted as transitioning from one- and two-family homes to mixed use. While most of Port Washington is zone for single-family homes, there are some Golden Age and Multiple Residence districts.

Port Washington is identified as an affluent New York suburb. At the time of the *Master Plan* the number of households was increasing slightly, with the household size decreasing. Also, while resident income was rising, it was not keeping up with the escalation in housing prices.

The map of Port Washington depicting the issues facing the community shows the area of the Subject Property along Hempstead Harbor as having environmental "issues" (i.e., preservation of wetlands in Hempstead Harbor). The floodplain and wetland sections of the shoreline should be maintained. However, this area is noted as representing valuable recreational resources for Town residents with the location of Bar Beach Park and Hempstead Harbor Park. As far as the overall area along Hempstead Harbor, the plan states that "any development should both further the restoration and maintenance of the shoreline water and visual quality and enhance public access to an area that is now relatively underutilized."

1998 Nassau County Comprehensive Master Plan

The *1998 Comprehensive Plan*, prepared by the Nassau County Planning Commission, et al. and adopted on December 15, 1998, is "a policy document which outlines a vision for the future of Nassau County. It focuses on the protection of the County's natural resources, current and long-range growth and development which is compatible with the County's quality of life, and provides guidance to decision makers, residents and organizations. The Plan is comprehensive because it blends and prioritizes the various factors and issues relevant to the subject matters of interagency planning and coordination, land use, environmental resources, transportation, housing, the economy, culture and recreation and community facilities and services" (Page P-1).

The *1998 Comprehensive Plan* is divided into several topics, including Interagency Planning and Coordination; Land Use; Environmental Resources; Transportation; Housing; Economy; Culture and Recreation; Community Facilities and Services. The land use, environmental resources and housing sections of the *1998 Comprehensive Plan* are the most relevant to the Proposed Project. The relevant goals of these sections, and the Proposed Action's consistency with each, is detailed in **Section 3.5.3**.

Nassau County Comprehensive Plan Update 2008: Trend Analysis

The Nassau County Master Plan Update, Trends Analysis (the 2008 Update) was undertaken in 2008, approximately five years after the 2003 Update to address changes in the economy and outline the County's vision for a "New Suburbia." Relevant to the Proposed Action, the 2008 Update outlined the occurrence of subdivision plans that have taken place across the County while emphasizing the predominance of high-density lots being approved by the Nassau County Planning Commission 2003-2007. As the 2008 Update is a trend analysis, rather than a goals-oriented document, there are no specific recommendations with respect to land use.

3.5.2.5 New York State Department of State Coastal Management Program

The Subject Property is located within the Coastal Zone of New York State. Projects that are located within the Coastal Zone, and are subject to federal funding, permitting, and/or authorization, are required to demonstrate consistency with the New York State Coastal Policies. Since the Proposed Action will require federal permitting by the USACE, it requires preparation of a consistency analysis with the 44 coastal polices established by the New York State Department of State (NYSDOS) that promote the beneficial use of coastal resources, prevent their impairment, or otherwise address activities that may affect resources within the New York State Coastal Zone. A detailed assessment of the Proposed Action's consistency with the NYS Coastal Policies are within **Section 3.11**.

3.5.3 Potential Impacts

3.5.3.1 Land Use and Zoning

Upon implementation of the Proposed Action, the use of the Subject Property would change from industrial to multi-family residential, with associated promenade, pier and marina. The existing use would be terminated, and the facilities demolished/removed, including the pier.
Subsequently, the site would be remediated, cleared, graded, and developed accordingly, and stormwater, sewer, water supply, electric and natural gas infrastructure would be installed to support the proposed residential development.

As multi-family residential development is not a permitted use under the existing R-AAA zoning district, the Proposed Action requires a change of zone to the Town's Multiple Residence (RM) zoning district. The proposed zoning change would allow for the construction of the proposed 176-unit multifamily development at the Subject Property, which would achieve a variety of local and regional land use and housing goals by providing more rental options within the County, as discussed in **Section 2.3** and in more detail below.

As described in greater detail in **Section 3.11**, the proposed residential building is a waterenhanced use, and the marina and associated amenities are water-dependent uses.

The proposed residential development would utilize the existing curb cut on West Shore Road. This driveway would provide entry to the at-grade parking area located adjacent to the proposed residential building and West Shore Road as well as provide entry to the below grade parking level. This driveway would also provide connection to the adjacent North Hempstead Beach Park parcel (Lot 1035) which would be developed, by the Applicant, for parking that will be shared with the proposed development. Under Town Resolution No. 454-2008, private development with limited public access to the waterfront would be authorized to use Lot 1035 for vehicular parking for the purpose of complying with parking requirements under any applicable zoning ordinance.

The construction of the residential development with associated parking, marina and associated landscaping would increase landscaping and pervious pavement on the site (refer to the Site Plan in **Appendix C**). Water/wetlands coverage would be slightly increase as a result of the construction of the public promenade, pier, and marina. Further detail is provided in **Table 3-12**, below.

Type of Coverage	Existing Total Area (percent)	Existing Upland Area Only (percent)	Proposed Total Area (percent)	Proposed Upland Area Only (percent)	Total Change in Acres
Roads, buildings, and other paved or impervious surfaces	2.36± (32.9%)	2.36± (32.9%)	1.40± (19.5%)	1.40± (19.5%)	- 0.96±
Wetlands	4.48± (62.5%)	0 (0%)	4.73±* (66.0%)	0 (0%)	+ 0.25±*
Non-vegetated	0.08± (1.1%)	0.08± (1.1%)	0.06± (0.8%)	0.06± (0.8%)	- 0.02±
Lawn/Landscaping	0.25± (3.5%)	0.25± (3.5%)	0.46± (6.4%)	0.46± (6.4%)	+ 0.21±
Pervious Pavement	0.00± (0%)	0.52± (7.3%)	0.52± (7.3%)	0.52± (7.3%)	+0.52±

Table 3-12 Land Use and Covertype

*The existing pier will be removed and replaced by a pier with a smaller footprint, thereby increasing the Subject Property's wetland area.

The proposed change of zone to the existing RM zoning district would allow for the construction of the proposed multi-family residences at the Subject Property in a manner that would achieve a variety of goals and provide a number of benefits. For example, the rezoning would serve as a catalyst for the extensive environmental cleanup of the property

and its redevelopment in accordance with the Shared Vision Plan, as identified below. Also, the change of zone would permit redevelopment of the Subject Property that would include public access to the waterfront via the proposed promenade, pier and marina that would continue and complement the reactivation of the east side (North Hempstead Beach Park) of the Port Washington Peninsula, whereas no public access is currently available at this location. The rezoning would allow the provision of public amenities that would serve as a northward extension of the Hempstead Harbor Shoreline Trail, and that are consistent with the Town's overall master plan for Port Washington, as identified below.

Permitted uses in the RM zoning district include multiple dwellings (i.e., multi-family residences), in conformance with the provisions of the Multiple Dwelling Law, as well as:

- > Clubhouse, fraternity house or lodge
- > Two-family attached residence buildings
- > Detached group garage
- > Single-family attached townhouse.

Conditional uses under the RM zoning district include (Section 70-67):

- > Senior citizen facilities including:
 - Senior independent-living facilities
 - Senior congregate-living facilities
 - Senior assisted-living facilities
 - Senior day-care facilities

The above-mentioned Multiple Dwelling Law (Multiple Residence Law of the Town of North Hempstead), Chapter 8 of the Town Code, provides regulations to ensure proposed multi-family residential developments meet fire safety and construction standards. As such, the proposed development is subject to the New York State Uniform Fire Prevention and Building Code; refer to **Section 3.7.2** for the proposed fire prevention and safety measures to be installed under the Proposed Action.

The bulk and dimensional requirements of the RM district are summarized in **Table 3-13**, below.

Dimension	Requirements	Provided		
Maximum Height	3 stories/45 Feet	5 stories/69.75 Feet*		
Minimum Plot Area	1,500 SF per family	504 SF/unit*		
Maximum Lot Coverage	35%	64.23%*		
Minimum Landscaped	10 Feet	6.35 Feet*		
Buffer Area				
Minimum Floor Area	600 SF	Less than 600 SF/unit*		
Minimum Front Yard	25 Feet	0.02 Feet*		
Minimum Side Yard	25 Feet	6.35 Feet*		
Minimum Rear Yard	20 Feet	0.17 Feet*		
Minimum Outdoor	100 SF/dwelling unit	Less than 100 SF/unit*		
Recreation Area	(17,600 SF)			
Parking Requirements	2.25 spaces per unit	300 Spaces*		
	1 space per 1 slip			
	1 space per 1 EMP			

Table 3-13 Bulk and Dimensional Red	quirements of the RM Zoning District
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*A variance will be required.

As shown above, the proposed development would require variances from several of the bulk, dimensional and parking requirements for the RM zoning district. These variances include maximum height, minimum landscaped buffer area, minimum front yard, side yard and rear yard setbacks, minimum plot area and floor area, minimum recreational area, maximum lot coverage, and parking requirements.

3.5.3.2 Community Character

The Subject Property is located along the West Shore Road corridor, an important roadway on the Port Washington Peninsula, providing connection from Northern Boulevard to the south to Beacon Hill Road to the north. The corridor comprises mainly open space/recreational and industrial uses, with multi-family and single-family residential uses prominent within the primary Study Area to the west and north of the corridor.

The Proposed Action would enhance the character of the Subject Property and the surrounding area within the primary Study Area by redeveloping a Brownfield industrial property with a vibrant residential development with a publicly accessible promenade, pier, and marina to meet the existing and future demand for such type of residential rental development, consistent with current trends on Long Island and in suburban areas throughout the country.

The provision of high-quality multi-family rental units within the Proposed Action would help meet the documented need for additional housing options on Long Island. As indicated in **Section 2.3**, Long Island Index's study, *Long Island's Need for Multifamily Housing*, the high housing costs on Long Island are primarily due to insufficient housing stock, supporting the need for more housing options on Long Island. Additionally, the Proposed Action would support a housing type that is responsive to larger real estate trends toward an increasing, cross-generational demand for "surban" communities, or communities that provide a mix between suburban living and urban amenities including access to public transportation and

downtown centers.⁸¹ Although the Subject Property is approximately 1.3-miles (as the crow flies) from the Port Washington LIRR, the Applicant intends to provide shuttle service to and from the train station and downtown as an amenity for the residents.

Additionally, this redevelopment would continue and complement the reactivation of the east side of the Port Washington Peninsula as per the *Master Plan for the Town of North Hempstead Beach Park*. Activities on the site, which is one factor that defines community character, would change considerably under the Proposed Action. The change to a multifamily residential development with a publicly accessible promenade, pier and marina would be significant. The layout of the property would allow for entrance to the site from West Shore Road for vehicles, with connection to the Subject Property for pedestrians from the adjacent North Hempstead Beach Park. The public amenities included in the redevelopment of this property would serve as a northward extension of the shoreline Hempstead Harbor Trail and would be consistent with the *Shared Vision Plan's* goal to expand that trail. The proposed marina would provide the potential for public rental of marina slips. Together with the promenade and pier, introduction of the marina would increase recreational opportunities for the general public. The public access to the Subject Property is a key component of the Proposed Action.

In contrast to the predominantly recreational and industrial uses along the corridor, which reinforce a vehicle-dominated character along the corridor, the proposed residential development would encourage residents and visitors to walk and utilize the adjacent park amenities and trails and utilize the amenities on-site including the shuttle service.

Moreover, the Proposed Action would be consistent with the character of both the Village of Roslyn and Manhasset Bay secondary Study Areas, particularly as the proposed development would allow for a multi-family residential development fronting the water with a publicly accessible promenade, pier, and marina. The Proposed Action would extend the existing trail and walkways from the adjacent North Hempstead Beach Park allowing for an easily accessible, walkable, and active corridor along West Shore Road.

Overall, the Proposed Action would improve the Subject Property and the surrounding community through significant site remediation on a Brownfield site and would support the provision of diversified housing options to the residents of Port Washington and Long Island. Moreover, the Proposed Action would improve community character along the West Shore Road corridor through the reinvigoration of the Subject Property. Although, multi-family residences do not currently exist in the immediate vicinity along the West Shore Road corridor, as mentioned above, the Proposed Project would be one of several multi-family residential buildings within close proximity to the Subject Property (i.e., the Amsterdam at Harborside and The Harborview). Therefore, there would be no significant adverse impacts to community character as a result of the Proposed Action.

⁸¹ REBusiness Online. *Not Urban, Not Suburban: Why Surban Living is Here to Stay.* March 25, 2021. Available at: https://rebusinessonline.com/not-urban-not-suburban-why-surban-living-is-here-to-stay/

3.5.3.3 Relevant Comprehensive Plans and Studies

North Hempstead Beach Park Master Plan

As discussed above, the *North Hempstead Beach Master Plan* sets forth a framework and goals to shape how all recreational and undeveloped Town properties within the northeastern portion of the Port Washington Peninsula are to be developed. The consistency of the Proposed Action with the relevant goals and framework is discussed below.

The Proposed Action includes the development of Lot 1035, which is Town-owned property, in conjunction with the proposed building. The Applicant is proposing to develop Lot 1035, at no Town expense, to be used as accessory off-street parking. The proposed parking lot would be utilized by residents and visitors of the proposed residential development as well as visitors of the North Hempstead Beach Park. Along with the improvements contemplated to the adjacent public park called for in the North Hempstead Beach Park Master Plan, including shoreline trail continuation and a shared bike and pedestrian pathway, this redevelopment would continue and complement the reactivation of the east side of the Port Washington Peninsula. The public amenities included in the redevelopment of this property (including the provision of a public promenade and pier) would serve as a northward extension of the shoreline Hempstead Harbor Trail and would be consistent with the Vision Plan's goal to expand the existing trail (detailed below). The proposed marina would provide the potential for public rental of marina slips. Together with the promenade and pier, introduction of the marina would increase recreational opportunities for the general public. Therefore, the Proposed Action is consistent with the Final Master Plan as set forth under the North Hempstead Beach Master Plan.

Shared Vision Plan for the Port Washington Peninsula

Redevelopment of the Subject Property with a residential building and public amenities, including the provision of a public promenade, pier and marina that would serve as a northward extension of the shoreline Hempstead Harbor Trail, would be consistent with the *Shared Vision Plan's* goal to expand the existing trail. The direct access to the Hempstead Harbor waterfront through the construction of a promenade, pier and marina would be consistent with the *Shared Vision Plan's* goal to expand the existing trail. The direct access to the Hempstead Harbor waterfront through the construction of a promenade, pier and marina would be consistent with the *Shared Vision Plan's* goal to connect to the waterfront. The redevelopment of the existing Brownfield site would revitalize the Subject Property with an updated, modern development consistent with the plans for the redevelopment of Hempstead Harbor Beach Park. Additionally, the Proposed Project would include improved pedestrian amenities such as sidewalks, would eliminate the existing gravel and sand storage on-site and would improve the aesthetics of the site and views of the Subject Property from the Town's Beach Park. Therefore, the Proposed Action is consistent with the recommendations under the *Shared Vision Plan*.

Harbor Management Plan for Hempstead Harbor

As discussed above, the HMP was prepared to provide framework for identifying key issues and formulating recommendations to address issues pertaining to the evaluation of whether future actions are consistent with the HMP. The goals established within the HMP are listed below and the consistency of the Proposed Project with each are discussed below. Also, see **Section 3.11**, which discusses the Proposed Project's consistency with the New York State coastal policies.

Goal 1: Ensure efficient and safe navigation and operating conditions in Hempstead Harbor.

The Proposed Action would result in the removal of existing navigational hazards within Hempstead Harbor, including the dilapidated remains of piers (timber piles to be cut at the mean low water elevation), a steel dry dock, sunken vessels, and other inwater structures and debris. The installation of new in-water structures, including the proposed marina and public pier, would be subject to permitting by the NYSDEC and USACE and therefore would be designed and operated in accordance with all applicable agency regulations, permit conditions, and BMPs related to safe navigation. In particular, USACE permitting for in-water structures would occur under Section 10 of the Rivers and Harbors Act of 1899, the stated purpose of which is to protect navigation and navigable channels. Moreover, permitting for structures located over, within, or adjacent to Town Waterways is subject to permitting under Town of North Hempstead Town Code § 42, the legislative intent of which is to preserve and maintain open and clear space in waterways, and to ensure that structures in public waterways are "erected and maintained in such manner that all such structures contribute to the health, safety and general welfare of the community."

Therefore, the Proposed Action is consistent with this goal.

Goal 2: Protect Hempstead Harbor's water-dependent uses and promote the siting of new water-dependent uses at suitable locations, without impacting important natural resources.

Implementation of the Proposed Action would result in the removal of in-water and shoreline structures associated with historical, but inactive, water-dependent industrial/commercial uses within Hempstead Harbor, including the dilapidated remains of bulkheads, piers, a steel dry dock, sunken vessels, and other in-water structures and debris. The Proposed Action would further result in the installation of a public pier and a 20- to 30-slip marina within Hempstead Harbor, thereby creating new water-dependent recreational uses within the harbor. Significantly, the proposed work activities described above are subject to regulation and permitting by the NYSDEC and the USACE, which are the New York State and federal agencies, respectively, that are charged with protecting and, where possible, improving, the wetland and aquatic resources of Hempstead Harbor. As such, the proposed waterdependent uses and work activities associated with the construction of same would be subject to the conditions, regulations, and prohibitions for the protection of natural resources included in the required NYSDEC and USACE permits for the Proposed Action. The proposed water-dependent uses would also be subject to all applicable Town requirements and conditions intended for the protection of the wetlands and surface waters of Hempstead Harbor. Significantly, in addition to the removal of inwater structures and debris, the Proposed Action would result in benefits to the natural resources of Hempstead Harbor through a net expansion of 6,931 SF of tidal wetland area, as well as remediation of subsurface contamination, a reduction in impervious surfaces and installation of stormwater infrastructure at adjacent terrestrial portions of the Subject Property, thereby improving water quality within the harbor.

Based on the foregoing, the Proposed Action would transform an underutilized and degraded portion of Hempstead Harbor to a location providing multiple opportunities for passive and active recreational water-dependent uses, while maintaining and improving natural resources.

Therefore, the Proposed Action is consistent with this goal.

Goal 3: Redevelop vacant and underutilized waterfront land on Hempstead Harbor with appropriate uses.

As noted in the consistency analysis with Goal 2 of the HMP, implementation of the Proposed Action would result in the removal of in-water and shoreline structures associated with historical, but inactive, water-dependent industrial/commercial uses within Hempstead Harbor, including the dilapidated remains of bulkheads, piers, a steel dry dock, sunken vessels, and other in-water structures and debris. The Proposed Action would further result in the installation of a public pier and a 20- to 30-slip marina within Hempstead Harbor, thereby creating new water-dependent recreational uses on waterfront land on Hempstead Harbor. As such, the Proposed Action would redevelop and improve an underutilized and degraded portion of Hempstead Harbor with appropriate passive and active recreational water-dependent uses.

Goal 4: Increase water-related recreational opportunities within Hempstead Harbor and along the harbor's shoreline and increase public access to the waterfront.

Despite its waterfront location on Hempstead Harbor, the Subject Property does not currently provide water-related recreational opportunities or public access to the waterfront. Implementation of the Proposed Action would result in the construction of a marina and public pier at the Subject Property, thereby providing multiple opportunities for water-related recreational opportunities and providing for public access to the waterfront at a location where no such access currently exists.

Therefore, the Proposed Action is consistent with this goal.

Goal 5: Protect and enhance Hempstead Harbor's natural environment and open space resources, including surface water quality, wetlands, coastal fish and wildlife habitats, upland natural areas, and important viewsheds.

As detailed in the consistency analysis with Goal 2 of the HMP, the Proposed Action would be subject to regulation and permitting by the NYSDEC, USACE, and the Town, and therefore would comply with all applicable agency regulation, permit conditions, and BMPs related to the protection of the natural resources of Hempstead Harbor. Moreover, the Proposed Action would result in the following enhancements to the natural environment and open space resources of Hempstead Harbor:

- A net expansion of 6,931 SF of tidal wetland area would occur as a result of the Proposed Action. The expansion of wetland area will improve the wetland functional benefits of Hempstead Harbor, in keeping with New York State and federal policies to increase the quantity and improve the quality of wetlands.
- Demolition/removal of existing shoreline bulkheads and the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris will substantially improve wetland habitat quality at the Subject Property and within Hempstead Harbor as a whole.

- Remediation of subsurface contamination at terrestrial portions of the Subject Property under the Brownfield or similar cleanup program would improve upland habitat conditions, while eliminating a potential source of harmful contamination to the wetlands and surface water habitats of Hempstead Harbor
- Vegetated (lawn/landscaping) habitat at the Subject Property would increase from 0.25± acre to 0.46± acre, and would include native tree, shrub and herbaceous plant varieties, thereby improving the quantity and quality of vegetation and associated wildlife habitat potential.
- The removal of the existing non-native/invasive vegetation from upland areas and installation of non-invasive species will prevent further spread of invasive plant species from the Subject Property to neighboring properties along Hempstead Harbor.
- The Proposed Action would result in a reduction in impervious surfaces at the Subject Property of nearly one acre (0.93± acres).
- No stormwater management infrastructure currently exists at the Subject Property and untreated stormwater runoff carrying sediments and pollutants drains directly to Hempstead Harbor along the waterfront of the Subject Property. The proposed stormwater management practices at the Subject Property would comply with all NYSDEC and local requirements for protection of wetland and aquatic resources, resulting in water quality improvements within Hempstead Harbor.

Based on the foregoing, the Proposed Action would protect and enhance Hempstead Harbor's natural environment and open space resources and therefore is consistent with this goal.

- **Goal 6:** Preserve important historical resources along the waterfront of Hempstead Harbor. *As indicated in Chapter 3.14, there are no historic resources along the waterfront of Hempstead Harbor within the boundary of or directly adjacent to the property.*
- **Goal 7:** Improve linkages between the Hempstead Harbor waterfront and adjacent downtown areas.

A shuttle would be provided to and from the Port Washington LIRR station and downtown Port Washington to increase connectivity and link the eastern portion of the Port Washington Peninsula with the downtown.

Goal 8: Engage in a collaborative effort among the municipalities surrounding Hempstead Harbor, by means of innovative inter-municipal planning and community development techniques that link environmental protection, economic prosperity, and community well-being, so as to ensure effective long-term community, regional, and watershed vitality.

The Applicant is a private developer and as such, this goal is not applicable. However, the Proposed Project is being developed in accordance with regional planning goals (refer back to **Section 3.5.2**).

Goal 9: Recognize and build upon the unique characteristics and circumstances of Hempstead Harbor and its watershed in developing approaches to the following concepts: revitalizing existing communities and promoting livable neighborhoods; preserving open space and critical environmental resources; encouraging sustainable economic development; improving partnerships, service-sharing arrangements, and collaborative projects; and heightening public awareness.

The redevelopment of the Subject Property will revitalize the community and promote a livable neighborhood while enhancing the character of the Subject Property and the surrounding area by redeveloping a Brownfield industrial property with a vibrant residential development with a publicly accessible promenade, pier, and marina to meet the existing and future demand for such type of residential rental development, consistent with current trends on Long Island and in suburban areas throughout the country.

1989 Town of North Hempstead Master Plan

The *Town Master Plan* is almost 30 years old. While some of the recommendations remain relevant, a 30-year-old plan cannot necessarily recognize and capture the needs of the changing demographics over this time period. There has been a rapid rise in housing costs and a shift to an older population within the Town and County. Residents still continue to commute from the Town into Manhattan and other places on Long Island. The types of housing that would attract younger people and well as retirees to stay in the Town is in short supply in the Town, County and most of Long Island. The following is a summary of how the proposed development conforms to the goals established in the *1989 Town Master Plan*.

Land Use and Zoning

The first goal set forth in this section is to maintain the small-scale suburban character of the Town. The Subject Property is shown as being located in a medium-density residential area. The proposed development is not small-scale; however, the Subject Property is unique in its geography and warrants consideration for a different type of development than is typically found in the remainder of the Town. As previously discussed, the Subject Property is situated within the Town's R-AAA Zoning District—it is a waterfront property with access to Hempstead Harbor and North Hempstead Beach Park. The site is also served by public sewer and public water.

The proposed type of land use (high-density residential), while not in keeping with the traditional suburban development pattern as envisioned in the *Town Master Plan*, addresses the changing demographics within the Town and County, and takes advantage of the Subject Property's unique location on the waterfront.

The Environment

The proposed multifamily residential project is a redevelopment of an existing underutilized industrial site. Therefore, this is a development that uses previously developed land, that has access to transit, Town Parks, and would be connected to both public sewer and water. According to the *Town Master Plan*, the Subject Property is shown to be in an area blighted with environmental issues (Page 56). Hempstead Harbor is an impaired surface water body due to pathogens from stormwater runoff associated with industrial and commercial activity. The Subject Property currently exists as an industrial site, landscaping/construction materials such as sand, mulch, topsoil and stone. Existing conditions on the site include a deteriorating concrete dock and exposed stockpiles located directly adjacent to Hempstead Harbor. Stormwater and erosion at this site could carry harmful pollutants into Hempstead Harbor, which is already an impaired surface water body.

The redevelopment of this site would help protect Hempstead Harbor and prevent future erosion in an area deemed sensitive to environmental issues by the *Town Master Plan*. The Proposed Action would demolish and reconstruct the existing dock on-site with a brand-new dock, remove all construction-stockpile materials, and utilize stormwater pollution prevention and erosion control measures during construction and operation.

The proposed project would be in conformance to the environmental goals of the *Town Master Plan*.

People and Housing

The *Town Master Plan* discusses the goal of providing opportunities for the development of various housing types (including both homeownership and rental opportunities). The residents attracted to West Shore Residences would be renters-by-choice—people who do not have the intention of buying a home or who may be empty-nesters who have down-sized and sold their homes. Such renters-by-choice include not only empty-nesters, but young professionals (prior to starting families), career professionals (some with no children), and retired persons. According to the National Multi Housing Council, "data support the notion that an increasing number of households now prefer apartment living, even though they could afford to buy a home." Further, according to *Practical Apartment Management* by Edward N. Kelley "empty-nesters, career professionals and retired people are renters by choice. For some, the situation is one in which the extra space available in purchased housing is no longer needed. Others want the freedom provided by renting (sometimes referred to as the 'lock and leave' set); these people are making a conscious decision in their choice to be a renter." The West Shore Residences project provides these "renters-by-choice" an alternative to single-family home ownership.

In addition, the *Town Master Plan* indicates the need to provide for adequate housing. In the *Town Master Plan*, local residents were asked questions pertaining to the Town and development trends they deemed appropriate. When asked about luxury housing, the majority of respondents agreed that luxury housing is an appropriate development in the Town. The West Shore Residences project would provide a total of 176 luxury units after Project completion.

Based on the foregoing, the proposed development conforms with the housing goals promulgated by the *Town Master Plan*.

Transportation

One of the main transportation goals is to optimize alternative transportation modes, particularly with respect to expanding opportunities for use of the railroad stations. The West Shore Residences residential development is located approximately 1.4 miles from the Port Washington LIRR station and Long Island Nassau Inter-County Express (NICE) bus routes and would allow a population of residents to take advantage of the proximity to public transportation through the provision of a shuttle bus to the train station and downtown. Furthermore, North Hempstead Beach Park is directly adjacent to the Subject Property, providing residents walking access to local Town parks and open spaces. Additionally, based on the Traffic Impact Study, impacts to traffic on West Shore Road would not be significant as a result of the Proposed Action. Thus, the proposed project would help meet the goal of expanding transportation choices in the Town.

Community Service

While none of the goals outlined in the *Town Master Plan* are directly relevant to the Proposed Project, the analysis of community services contained in **Section 3.4.2** of this DEIS shows that while the demand for services would increase, it is expected that the community service providers could handle the new development. The Proposed Action would also provide a boat slip for use by emergency service providers. The proposed West Shore Residences development is also expected to generate additional property taxes, which would assist in offsetting impacts to community service providers. Furthermore, the Proposed Action would grant public access to newly created waterfront-recreational amenities.

The Economy

The attractive new residential building would appeal to residents who would regularly spend money in the Town, and it would generate 176-units worth of property taxes. Waterfront properties are highly valued on Long Island and are a driving factor in the success of the economy. It should be noted that the existing industrial use on the Subject Property is not a water-dependent use.

While the industrial use would be removed from the site, it would be replaced by a residential use that would generate property taxes, provide a new population in the area to patronize local businesses, and would help improve the economic resources in the area, in conformance with this goal.

Therefore, the provision of a new population to the area would help support local businesses (even if many residents work elsewhere), strengthen the local economy, and utilize the Subject Property in a way that is appropriate for its coastal location.

1998 Nassau County Comprehensive Master Plan

As described above, the *1998 Comprehensive Plan* is divided into several topics, the most pertinent to the Proposed Action being land use; environmental resources and housing, as discussed below.

The goal of the land use chapter is to promote a balanced pattern of land use that encourages the concentration of future development in established areas with adequate infrastructure and facilities. As previously discussed, although the Subject Property is an active use within an established area, the Subject Property is not served with adequate infrastructure and facilities. Under the Proposed Action, the Applicant is proposing to connect to and enhance the sewer and water infrastructure that is located on-site and within the surrounding area (see **Section 3.7.2** for additional discussion on proposed infrastructure improvements). Thus, the Proposed Action is consistent with this recommendation.

The land use section of this plan also emphasizes the efficient utilization of the existing transportation network. The Port Washington LIRR station is located less than 1.5 miles west of the Subject Property and numerous NICE bus stops are located within the area surrounding the Subject Property. A shuttle would be provided to and from the Port Washington LIRR station and downtown Port Washington to facilitate access to public transit and reduce vehicle trips generated by the Proposed Project. Additionally, the Subject Property and, thus the proposed residential building, is located on an important roadway on the Port Washington Peninsula. Residents of the development in the area would not have to

travel on residential streets to get to downtown Port Washington or to downtown Roslyn or points south. Based on the foregoing, the Proposed Action would effectively and efficiently use the surrounding transportation network, in accordance with this recommendation if the *1998 Comprehensive Plan*.

The Environmental Resources section of the *1998 Comprehensive Plan* details the various resources found within Nassau County, the effect of developmental pressure on these resources, and various programs and initiatives implemented to address these pressures. Examples of such resources include groundwater, surface waters, preserves, fish and wildlife, and air. As discussed throughout this DEIS, the proposed development can be accommodated at the subject location in a manner that does not result in significant, unmitigated impacts on any such environmental resources, refer to **Section 3.4.3**.

The Housing section of the 1998 Comprehensive Plan stresses the ever-growing need for increased housing, specifically citing exceptionally low vacancy rates within the County and the need for more housing options. To address the challenge of housing availability, the 1998 Comprehensive Plan specifically recommends "[e]ncouraging appropriate housing to locate in areas close to shopping, community facilities, services and transportation facilities."

As previously described, the Proposed Action would allow for future development of a 176unit multi-family residential development within a mixed-use suburban community that is well served by community services, and retail amenities (within nearby downtowns). Accordingly, the Proposed Action would provide additional housing in Nassau County an area in need for additional housing options, in accordance with this recommendation.

Nassau County Comprehensive Plan Update 2008: Trend Analysis

As noted above, the 2008 Update outlined development trends in the County and does not contain any goals or recommendations. Therefore, a consistency analysis was not performed.

3.5.4 Proposed Mitigation

No significant adverse impacts to zoning, land use, or community character have been identified. Therefore, no mitigation measures are proposed.

3.6 Traffic and Transportation

3.6.1 Regulatory Framework

A Transportation Impact and Parking Analysis Report (hereinafter "TIS") was performed the Proposed Project. The TIS summarizes the comprehensive evaluation of the potential traffic impacts associated with the proposed redevelopment. The purpose of this study, which was prepared in accordance with the April 15, 2021 "Final Scope for Draft Environmental Impact Statement" from the Town of North Hempstead, is to determine if there are any significant traffic impacts due to the Proposed Project and to evaluate and propose mitigation measures, if required. This section of the DEIS summarizes the data collection process, traffic analysis procedures, and study conclusions and presents the findings of the TIS. The TIS is presented in its entirety in **Appendix J** of this DEIS.

The Town's parking regulations govern the number, location and size of parking spaces that are required for the Proposed Project. The Americans with Disabilities Act provides requirements for accessible parking spaces within the context of the total number of provided spaces. Additionally, as noted in **Section 3.5.3.1**, Town Resolution No. 454-2008 permits the Applicant to develop Town Lot 1035 for accessory parking if Lot 1005A (which is part of the Subject Property) is rezoned or utilized in a manner consistent with the *Shared Vision Plan for the Port Washington Peninsula*, including private development offering public access to the waterfront. Furthermore, the Proposed Project is subject to the Town's Traffic Code. Other laws and policies that govern traffic operations and street design, include, but are not limited to:

- American Association of State Highway and Transportation Officials (AASHTO) A Policy for the Design of Highways and Streets
- > United States Department of Transportation, Federal Highway Administration. 2009 Manual on Uniform Traffic Control Devices (MUTCD). Updated 2012.

3.6.2 Existing Conditions

3.6.2.1 Study Methodology

The following describes the methodology used in the TIS:

- > The Proposed Project site plan and related documents were reviewed to obtain an understanding of the project scope and layout.
- > A review was made of the adjacent roadway system and the key intersections that might be significantly impacted by the Proposed Project were identified by the Town in the DEIS scoping document.
- > Field inventories were made to observe the number and direction of travel lanes at the key intersections.
- > Crash data for the most recent five-year period for the study area were reviewed, tabulated, and summarized.
- > Turning movement counts were collected at the key intersections using Miovision cameras on a typical weekday during the weekday AM and PM peak periods and also for the Saturday midday peak periods.
- > Automatic Traffic Recording (ATR) counts were obtained for a 7-day period on West Shore Road and Beacon Hill Road.
- > The existing traffic volumes at the key intersections were expanded to the future No-Build year (assumed to be 2024).
- > The traffic generated by the proposed development was projected based on recognized traffic engineering standards.
- > The site-generated volumes were distributed along the adjacent roadway network and were added to the No-Build volumes to produce the proposed Build volumes.
- > Capacity analyses were performed for the key intersections for the Existing, No-Build, and future Build conditions.
- > The results of the analyses for the Existing, No-Build, and Build conditions were compared to assess any significant traffic impacts due to the Proposed Project.

- > The site access point was evaluated.
- The adequacy of the proposed off-street parking was evaluated, and the site layout was reviewed.
- > The need for traffic mitigation measures was evaluated.

3.6.2.2 Roadway and Intersection Conditions

The principal roadways and intersections in the project area are described below. The description of the roadways and key intersections include the geometric conditions and traffic control characteristics.

West Shore Road is a north-south County of Nassau roadway which connects Port Washington (to the north of the site) with Northern Boulevard (New York State Route 25A) and the Roslyn Village area, and then provides connections to the Long Island Expressway (Interstate Route 495) and the Northern State Parkway for regional access. West Shore Road is classified as an urban minor arterial and generally provides two travel lanes in each direction and widens at major intersections to provide turn lanes. There are several signalized intersections along this roadway. A sidewalk generally exists along the east side of the roadway. The posted speed limit is 45 mph. On-street parking is not permitted.

Main Street (Roslyn) is a County Road that runs south from Old Northern Boulevard to Railroad Avenue, south of which it is designated as Roslyn Road. It provides one travel lane in each direction. Sidewalks generally exist along the east side of the roadway with on-street parking also along the east side of the roadway. As it nears Old Northern Boulevard, sidewalks exist on and on-street parking is permitted along both sides of the roadway. The posted speed limit within the study area is 30 mph.

Old Northern Boulevard extends between Northern Boulevard at its westerly end to East Broadway at its easterly end before continuing in a northerly direction. It is a County of Nassau roadway that runs east-west between Northern Boulevard and West Shore Road, north-south between West Shore Road and Main Street and east-west from Main Street to East Broadway. The east-west sections are classified as an urban major collector and the north-south sections are classified as an urban minor arterial. Old Northern Boulevard generally provides two travel lanes in each direction with turn lanes at the major intersections between Northern Boulevard and Main Street and one travel lane in each direction between Main Street and East Broadway. Sidewalks are generally provided on both sides of the roadway between Northern Boulevard and Main Street. The posted speed limit is 30 mph for the east-west sections and 25 mph for the north-south section.

Beacon Hill Road is a southwest-northeast County of Nassau roadway that extends between Beacon Drive and Port Washington Boulevard. It is classified as an urban minor arterial. It is generally a two-lane roadway with a posted speed limit of 25 mph. On-street parking is permitted on some sections of Beacon Hill Road. A sidewalk extends along the east side of the roadway.

Port Washington Boulevard (NYS Route 101) is a north-south New York State Department of Transportation roadway which connects Middle Neck Road at Harbor Road to the north and Searingtown Road at Northern Boulevard (NYS Route 25A) to the south. Port Washington Boulevard is classified as an urban principal arterial other. Between Northern Boulevard and Beacon Hill Road, Port Washington Boulevard generally provides two travel lanes in each direction and widens at major intersections to provide turn lanes. There are several signalized intersections along this roadway. South of Waring Drive, Port Washington Road has a curbed median creating a divided highway. North of Waring Road to Beacon Hill Road, the travel lanes are separated by a two-way left turn lane. This section of Port Washington Boulevard contains sidewalks that generally exist along both sides of the roadway. The posted speed limit is 40 mph between Northern Boulevard and Salem Lane and 30 mph between Salem Lane and Beacon Hill Road. On-street parking is not permitted on most of Port Washington Boulevard between Northern Boulevard and Beacon Hill Road although there are some sections of the roadway where on-street parking is permitted, such as between Campus Drive and Beacon Hill Road.

North of Beacon Hill Road, Port Washington Boulevard generally provides one travel lane in each direction with sidewalks along at least one side and in some sections along both sides of the roadway. Portions of this roadway permit on-street parking. Port Washington Boulevard is posted at 30 mph between Beacon Hill Road and Harbor Acres Road/Sandy Hollow Road and 40 mph north of Harbor Acres Road/Sandy Hollow Road.

Longview Road is an east-west local roadway that extends between Beacon Hill Road to the east and Port Washington Boulevard to the west. Longview Road provides access to residential developments. It is generally a two-lane roadway with a posted speed limit of 25 mph. On-street parking is not permitted on Longview Road. No sidewalks exist along this roadway.

Main Street (Port Washington) is an east-west roadway between Port Washington Boulevard to the east and Shore Road to the west, where it becomes a north-south roadway west of Shore Road to Fifth Avenue. It is a Town of North Hempstead roadway classified as an urban minor arterial. It is generally a two-lane roadway that widens at major intersections to provide turn lanes. There are several signalized intersections along this roadway. Onstreet parking is generally provided along both sides of the roadway. Likewise, sidewalks also exist along both sides of this roadway. Main Street has a posted speed limit of 30 mph.

South Bayles Avenue is a north-south local roadway that extends between Main Street to the north and Beechwood Avenue to the south. It is generally a two-lane roadway with a posted speed limit of 30 mph. It provides access to the Port Washington train station. Sidewalks generally exist along both sides of the roadway. On-street parking is generally permitted along the west side of the roadway.

3.6.2.3 Study Intersections

To determine the potential traffic impacts of the Proposed Project, the following study intersections were identified for detailed analysis under the Existing, future No-Build and future Build conditions:

- > West Shore Road and Site Entrance (unsignalized)
- > West Shore Road and Harbor Park Drive South (signalized)
- > West Shore Road and Old Northern Boulevard (signalized)
- > Old Northern Boulevard and Main Street/Tower Place (signalized)
- Beacon Hill Road and Longview Road/Summit Road (signalized)

- > Port Washington Boulevard and Main Street (signalized)
- > Port Washington Boulevard and Beacon Hill Road (signalized)
- > Main Street and Bayles Avenue (signalized)
- > South Bayles Avenue and Vanderventer Avenue (unsignalized)
- > Port Washington Boulevard and Longview Road (unsignalized)

The study intersections are shown on **Figure 3-15**. Aerial photographs and detailed intersection discussions of each intersection are included in **Appendix J**.

Figure 3-15: Study Intersections



145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Vhb.



3.6.2.4 Existing Traffic Volume Data

Intersection turning movement counts at the study intersections were collected using Miovision cameras between 7:00 a.m. and 10:00 a.m. (for the weekday AM peak), between 4:00 p.m. and 7:00 p.m. (for the weekday PM peak), and between 11:00 a.m. and 2:00 p.m. (for the Saturday midday peak). The weekday AM and PM peak period counts were obtained for a three-day period on Tuesday, June 8, 2021, Wednesday, June 9, 2021, and Thursday, June 10, 2021. The Saturday counts were obtained for a two-day period on June 12, 2021, and June 19, 2021. The traffic counts were conducted during these times so that they coincided with the heaviest traffic flows associated with the proposed site, commuter activities and shopping in the local area. The number of count days and the hours of the counts were specified by the Town in the DEIS Final Scope. To provide a conservative analysis, the highest individual peak hour volumes over the multi-day count periods were used in the analysis.

Traffic counts were conducted at a time when traffic volumes could be affected by the Coronavirus Pandemic. To account for potential traffic volume changes, hourly traffic volumes were obtained using Automatic Traffic Recorders (ATR)s at the following locations:

- > West Shore Road (north of Seaview Boulevard
- > Beacon Hill Road (south of Orchard Farm Road).

The ATRs were installed during the 7-day period beginning Tuesday, June 8, 2021, through Monday, June 14, 2021.

It is noted that the traffic data utilized in this study were collected during the Coronavirus Pandemic. Therefore, the data were reviewed and compared against pre-pandemic traffic flow levels (based on traffic data collected by VHB and available from the NYSDOT and Nassau County Department of Public Works [NCDPW]) and adjustments made to the counts such that the volumes used in this study are representative of typical conditions. The Coronavirus Pandemic adjustments are included in **Attachment A** of the TIS (**Appendix J** of this DEIS).

The existing turning movement count summaries are available in **Attachment A** of the TIS (**Appendix J** of this DEIS). The existing weekday AM peak, weekday PM peak. and Saturday midday peak hour traffic volumes are shown in **Figure 3-16**.



Figure 3-16: Existing Peak Hour Traffic Volumes

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York





3.6.2.5 Crash History

Crash data for the Project Study Area were obtained from the NYSDOT Accident Location Information System (ALIS) for the latest available five-year period from January 1, 2015, to February 28, 2020, for the eight study area intersections listed below, as well as the segment of West Shore Road from Fairway Drive to West Shore Drive/Roslyn West Shore Drive, which passes near the project site. It is typically industry practice to only review the most recent three-year period, but the DEIS scoping document prepared by the Town required an examination of a five-year period. Crash information was also requested and obtained from the Port Washington Police Department and Nassau County Police Department, but VHB's review indicated that the most detailed and relevant data came from NYSDOT.

- > West Shore Road and Harbor Park Drive South
- > West Shore Road and Old Northern Boulevard
- > Old Northern Boulevard and Main Street/Tower Place
- > Beacon Hill Road and Longview Road/Summit Road
- > Port Washington Boulevard and Beacon Hill Road/Main Street
- > Main Street and Bayles Avenue
- > South Bayles Avenue and Vanderventer Avenue
- > Port Washington Boulevard and Longview Road

Review of the data shows that during the five-year period, a total of 278 crashes occurred at the eight study area intersections, and a total of 10 crashes occurred on the roadway segment. Tables 1 and 2 in the TIS summarize the intersection and segment crashes. Detailed crash data can be found in Attachment B of the TIS in **Appendix J** of this DEIS.

Of the 278 total intersection crashes, there were 64 injury crashes, 176 property damage collisions, 38 non-reportable incidents (no injury and less than \$1,000 in property damage), and no fatalities. Eight crashes involved pedestrians and five crashes involved bicyclists. The following is noted regarding the intersection crashes:

West Shore Road and Harbor Park Drive South

Of the 12 crashes that occurred at this intersection, more than half (seven) were rear-end. The remaining crashes were a mix of right-angle, sideswipe, right-turn, and "other". A closer look at the rear-end crashes revealed that they varied by direction and the primary contributing factor was following too closely. The other crashes at the intersection were also due to driver error, including improper turning, failure to yield the right-of-way, and disregarding traffic control devices.

West Shore Road and Old Northern Boulevard

A total of 86 crashes occurred at this intersection, including 26 overtaking, 22 rear-end, and 21 left-turn. The remaining were a mix of right-angle, sideswipe, head-on, fixed object, "other", and unknown crashes. It is noted that just over half of the of the overtaking collisions (14 of 26) occurred in the eastbound direction and were primarily attributed to improper passing/lane usage. A closer look at both the rear-end and left-turn crashes revealed that they varied by direction and the primary contributing factors were following

too closely (rear-end) and failure to yield the right-of-way (left-turn). The remaining crashes were also due to driver error, including disregarding traffic control devices and failure to yield the right-of-way. One crash involved a bicyclist who was making a left turn to travel westbound and failed to yield the right-of-way to the southbound vehicle.

Old Northern Boulevard and Main Street/Tower Place

A total of 25 crashes were reported at this intersection, including eight overtaking and five rear-end, all of which varied by direction and were primarily due to following too closely and improper turning/lane usage. The remaining crashes were a mix of right angle, right-turn, left-turn, fixed object, "other", and unknown, which were also due to driver error, including a failure to yield the right-of-way, improper turning, and driver inexperience/inattention.

Beacon Hill Road and Longview Road/Summit Road

Of the 15 crashes that occurred at this intersection, three were overtaking, three were rearend, and three involved pedestrians/bicyclists. The remaining crashes were a mix of rightangle, right-turn, sideswipe, and fixed object. The crashes all varied by direction and were attributed to driver error, including a failure to yield the right-of-way, following too closely, and improper turning/lane usage. Two crashes involved pedestrians who were crossing in dark/unlighted conditions with no signal or crosswalk. One pedestrian was struck by an eastbound vehicle going straight and the other was struck by a southbound vehicle making a left turn. One crash also involved a bicyclist who was struck by a vehicle making a left turn that failed to yield the right-of-way to the bicyclist.

Port Washington Boulevard and Beacon Hill Road/Main Street

A total of 92 crashes occurred at this intersection, including 26 overtaking, 25 rear-end, and 10 left-turn crashes. The remaining were a mix of right-angle, right-turn, head-on, fixed object, "other", and unknown crashes. It is noted that just over half of the overtaking collisions (14 of 26) occurred in the westbound direction and were primarily attributed to driver error, including improper turning/passing/lane usage, failure to yield the right-of-way, and driver inattention/inexperience. A closer look at the rear-end and left-turn crashes revealed that almost half of the rear-end crashes (11 of 25) occurred in the northbound direction while the left-turn crashes varied by direction. The primary contributing factors for the rear-end crashes were following too closely and driver inattention. The primary contributing factor for the left-turn crashes was failure to yield the right-of-way. It is noted that four crashes involved pedestrians at the intersection who were struck by vehicles that either failed to yield the right-of-way to the pedestrian or reported glare as the apparent contributing factor. Two crashes also involved bicyclists who were struck by turning vehicles that either failed to yield the right-of-way to the bicyclist or reported limited/obstructed view as the contributing factor.

Main Street and Bayles Avenue

The 28 crashes at this intersection included eight overtaking and seven rear-end. It is noted that almost all the of the overtaking collisions (six of eight) occurred in the eastbound direction and were primarily attributed to driver inattention and improper passing/lane usage. A closer look at the rear-end crashes revealed that they varied by direction and were

primarily due to following too closely. The remaining crashes were a mix of right-angle, right-turn, left-turn, other, and unknown collisions and were also due to driver error, including following too closely and failure to yield the right-of-way.

South Bayles Avenue and Vanderventer Avenue

A total of seven crashes were reported at this intersection, including two rear-end, two leftturn, one right-angle, one overtaking, and one collision with a pedestrian. The primary contributing factor for all the crashes was failure to yield the right-of-way. It is noted that one crash involved a pedestrian who was crossing without a signal or crosswalk and was struck by an eastbound vehicle. The apparent contributing factor was a failure to yield the right-of-way by both the pedestrian and the vehicle.

Port Washington Boulevard and Longview Road

A total of 13 crashes were reported at this intersection, including five rear-end, with the remaining crashes a mix of right-angle, overtaking, left-turn, "other", and unknown. The primary contributing factor for all the crashes was driver error, including following too closely, failure to yield the right-of-way, and turning improperly. It is noted that one crash involved a pedestrian who was crossing without a signal or crosswalk in the rain and was struck by an eastbound vehicle making a left turn due to glare. One crash also involved a bicyclist who was struck by a turning vehicle that failed to yield the right-of-way to the bicyclist.

Of the 10 total segment crashes (West Shore Road from Fairway Drive to West Shore Drive/Roslyn West Shore Drive), there were seven injury crashes, three property damage collisions, no non-reportable incidents (no injury and less than \$1,000 in property damage), and no fatalities. Of the 10 crashes that occurred on this roadway segment, half (five) were fixed-object crashes. The remaining crashes were a mix of overtaking, rear-end, left turn, and "other". A closer look at the fixed-object crashes revealed that while they all occurred in the northbound direction, the location of each crash along the segment varied. The contributing factors for all crashes also varied and were primarily due to driver error, including unsafe speed, driver inattention, and failure to yield the right-of-way.

3.6.2.6 Public Transportation

The closest LIRR station is approximately two miles away, on Main Street in Port Washington. This station is the easternmost one on the LIRR Port Washington Branch, which provides service directly to Penn Station in Manhattan, unlike most other branches which pass through Jamaica Station and require some passengers to change trains depending on whether their destination is toward Penn Station or Brooklyn. This direct service from Port Washington makes it an attractive station, since the peak period travel time between Port Washington and Penn Station is approximately 45 minutes, making the LIRR a convenient commuting option. There are commuter parking lots operated by the Port Washington Parking District that adjoin the station and these are regularly filled on weekdays, until the current pandemic changed travel patterns, especially with regard to use of public transportation. Based on current conditions, LIRR ridership is substantially reduced resulting in many vacant parking spaces in the commuter lots. The reduced ridership levels are expected to continue for a prolonged period of time, since many workers are now working from home and may continue to do so.

Nassau County operates the Nassau Inter-County Express bus system throughout Nassau County. However, there are no routes operating along West Shore Road near the Subject Property.

3.6.3 Potential Impacts

The analysis of future conditions, without and with the Proposed Project ("No-Build" and "Build" conditions, respectively), was performed to evaluate the effect of the Proposed Project on future traffic conditions in the area. Background traffic volumes in the study area were projected to the year 2024, reflecting the year when the project is expected to be completed and operational. The No-Build condition represents the future traffic conditions that can be expected to occur, even if the Proposed Project is not constructed. The No-Build condition serves as a comparison to the Build condition, which represents expected future traffic conditions resulting from both project- and non-project-generated traffic.

3.6.3.1 No-Build Condition

No-Build traffic volumes include existing traffic and new traffic due to background traffic growth and other significant planned developments in the immediate vicinity of the project site.

Other Planned Development

The Town of North Hempstead, the Village of Roslyn, and the Village of Flower Hill were contacted for information regarding other planned developments in the vicinity of the Subject Property that may impact the traffic volumes on the adjacent roadway network. Neither Village identified any projects, but the Town of North Hempstead identified the following developments:

> 7-Eleven, proposed at 1020 Port Washington Boulevard (Application Withdrawn)

Although the Applicant for this proposed development has not yet submitted an intersection analysis, it is noted that nearly one-half of the trips generated by the store would be considered pass-by trips and would not be directly added to the local traffic network, with the balance of the trips locally generated and likely not significantly impacting other intersections outside the immediate area. It is also noted that the magnitude of the trips generated would be lower than the widely accepted 100-vehicle-trip threshold determined by the Institute of Transportation Engineers (ITE) as unlikely to change the level of service of the roadway system or appreciably increase the volume-to-capacity ratio of an intersection approach.

> Alma Bank, proposed at 679 Port Washington Boulevard

Similar to the 7-Eleven, a significant portion of the site-generated traffic is expected to consist of pass-by trips, with the balance of the trips being relatively low and generally not overlapping with the normal peak hours on the roadway network.

> Port Washington Skating Annex at 81 Seaview Boulevard

This project will be a very low traffic generator and generally not generating additional trips during the peak hours on the local roadway network, since the facility will primarily be used by teenagers being dropped off by a driver on the way to another destination.

Based on the above, it was determined that the net increase in trips through the roadway network would not be of significance and would be accounted for in the background traffic growth factor.

As part of the development of No-Build condition, VHB reviewed the Transportation Improvement Program (TIP) prepared by the New York Metropolitan Transportation Council (NYMTC), which identifies federally funded projects planned and programmed by governmental agencies over the next five-year period. No projects affecting roadway capacity improvements were identified in that document, and VHB is not aware of any locally funded projects which would impact the capacity of local roadways in the study area.

Background Traffic Growth

To account for increases in general population and background growth not related to the Proposed Project, an annual growth factor was applied to the existing traffic volumes. Based on the NYSDOT published information, the growth rate anticipated for the Town of North Hempstead is 0.5 percent per year (three years at 0.5 percent per year) which was applied to the 2021 traffic data to develop the background traffic based on the anticipated Build year of 2024. After applying the growth factor to the existing traffic volumes, the resulting 2024 No-Build traffic volumes for the peak hours are shown in **Figure 3-17**.

3.6.3.2 Build Condition

To estimate the traffic impact of the proposed redevelopment, it is necessary to determine the traffic volumes expected to be generated by the Proposed Project. It is noted that to provide a conservative analysis of potential impacts, no credit was taken for the traffic associated with the existing industrial use on the site.

Project-Generated Traffic Volumes

To estimate the project-generated traffic, the *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE) was used. This widely used reference source contains trip generation rates for numerous land uses, including "Multifamily Housing (Midrise)" (Land Use Code #221). **Table 3-14** presents the anticipated trip generation due to the project for the key peak hours of study. After developing the TIS, the ITE published the 11th edition of the ITE *Trip Generation Manual*, which is now the latest version. However, use of the 10th edition results in a slightly more conservative analysis as more trips are generated for this development with the 10th edition than the 11th edition.



Figure 3-17: No-Build Peak Hour Traffic Volumes

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Path: \\vhb.com\gis\proj\Hauppauge\20528.00 Southern Land PW\Project\SiteLocation\Traffic\Traffic.AraK (lwiebelt, 4/18/2022)

Key: AM Peak (PM Peak) [Saturday Midday Peak]



Project Component	Component Size	AM Peak Hour		PM Pea	ık Hour	Saturday Midday	
Multifamily Residential ITE # 221 Mid-Rise	176 Units	Entering 26%	Exiting 74%	Entering 61%	Exiting 39%	Entering 50%	Exiting 50%
Totals		AM Peak Hour Trips PM Pea		PM Peak I	Hour Trips	Saturday Midday Trips	
		Entering	Exiting	Entering	Exiting	Entering	Exiting
		16	47	47	30	38	39
		63		77		77	

Table 3-14 Trip Generation Estimates

The trips for the boat slips are seasonal and relatively small (two to six trips) during the peak hours on weekdays and are not reflected in the analysis.

The trip generation associated with the Proposed Action indicates that the frequency of additional vehicles traveling on West Shore Road, when split by direction, would be in range of only one extra vehicle every two minutes.

3.6.3.3 Trip Distribution and Assignment

The trips originating from and destined to the Subject Property were assigned to the adjacent roadways based on data from the 2020 Census, as well as characteristics of the roadway network, the location of the site access point and likely destination points. The trip distribution percentages adopted for the Proposed Project and assigned to the local roadway network are shown in Figure 5 in the TIS. These were then applied to the trips generated by the Subject Property and the resulting site generated traffic volumes for the weekday AM peak, weekday PM peak and Saturday midday peak hours are shown in Figure 6 in the TIS. To determine the future Build condition traffic volumes, the project-generated trips were added to the No-Build traffic volumes at the key intersections. The resulting Build traffic volumes for the weekday AM peak, and Saturday PM peak, and Saturday midday peak hours are shown in Figure 7 in the TIS and herein as **Figure 3-18**.



Figure 3-18: Build Peak Hour Traffic Volumes

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Path: \\vhb.com\gis\proj\Hauppauge\20528.00 Southern Land PW\Project\SiteLocation\Traffic\Traffic.AraK (lwiebelt, 4/18/2022)

Key: AM Peak (PM Peak) [Saturday Midday Peak]



3.6.3.4 Level of Service and Delay Criteria

The evaluation criteria used to analyze area intersections in this traffic study are based on the 2000 & 6th editions of the *Highway Capacity Manual* (HCM). The term 'level of service' (LOS) is used to denote the different operating conditions that occur at an intersection under various traffic volume loads. It is a qualitative measure that considers several factors including roadway geometry, speed, travel delay and freedom to maneuver. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing short vehicle delays and LOS F representing the longer vehicle delays.

When evaluating intersection capacity results, in addition to the LOS, vehicle delay time should also be considered. Vehicle delay time (expressed in seconds per vehicle) is typically used to quantify the traffic operations at intersections. Delay time additionally has a range of values for a given LOS letter designation.

The LOS definitions for both the signalized and unsignalized intersections can be found in Attachment C of the TIS (**Appendix J**). Additional discussion regarding LOS and vehicle delay, and other measures for analysis of both signalized and unsignalized intersections, is presented in **Appendix J**.

The capacity analyses were performed using the traffic analysis software Synchro, Version 10, and computer program developed by Trafficware Ltd.

3.6.3.5 Level of Service Analysis

LOS analyses were conducted for the Existing, future No-Build, and future Build conditions for the study area intersections.

Signalized Intersection Analysis Results

The results of the capacity analyses for the Existing, No-Build and Build conditions are summarized in **Table 3-15** through **Table 3-17** below, for the weekday AM peak, weekday PM peak, and Saturday midday peak hours, respectively. The detailed capacity analysis worksheets are contained in Attachment D of the TIS (**Appendix J**).

Weekday AM Peak Hour

For the weekday AM peak hour (**Table 3-15**), all signalized intersections will operate at the same approach and overall intersection LOS during the Build condition as during the No-Build condition with all approaches and overall intersection LOS operating at LOS D or better. The one location where the approach LOS changes is the southbound approach at the Port Washington Boulevard & Main Street intersection which changes from LOS C (No-Build) to LOS D (Build) due to an increase in delay of less than three seconds. This increase in delay is nominal and the overall approach LOS is still considered to be acceptable at LOS D.

The capacity analysis shows that at the existing two-way stop-controlled intersection of West Shore Road and Site Access, the westbound approach operates at LOS D and the southbound left turn movement operates at LOS A in Existing and No-Build conditions. During the Build condition, the westbound approach operates at LOS C and the southbound left-turn movement operates at LOS A. Under Existing and No-Build conditions, there are no exiting right-turn movements from the Site Access so the average delay per vehicle for the westbound approach is based on only the exiting left-turn volume. Whereas in the Build condition due to the addition of right-turning movements, the average delay per vehicle is based upon the volume making both left and right-turn movements out of the site. In addition, during the Build condition there is a lower percentage of heavy vehicles due to the redevelopment of the site from an industrial to a residential use. These factors contribute to the reduced delay on the Site Access approach between the No-Build and Build conditions.

The capacity analysis shows that the westbound and southbound left turn movements at the Port Washington Boulevard and Longview Road intersection operate well at LOS B in the Existing, No-Build, and Build conditions.

The three approaches to the all-way stop controlled intersection of South Bayles Avenue and Vanderventer Avenue operate well at a LOS C or better in the Existing, No-Build, and Build conditions with no changes in LOS between the Build and No-Build conditions.

Given the low increases in delay and the acceptable overall and intersection LOS (LOS D or better) at each of the study intersections, no improvements are recommended.

	Traffic	Approach/ Existing 20		2021	No-Build	2024	Build 2024	
Intersection	Control	Movement	Delay	LOS	Delay	LOS	Delay	LOS
West Shore Road &	THEC	WB	33.6	D	34.8	D	19.1	С
Site Access	TWSC	SB L	0.0	А	0.0	А	9.0	А
		EB	41.6	D	41.7	D	41.7	D
West Shore Road &		WB	0.0	А	0.0	А	0.0	А
Harbor Park Drive	S	NB	5.3	А	5.4	А	5.5	А
S./Transfer Station		SB	10.0	А	10.1	В	10.2	В
		Overall	8.3	А	8.5	А	8.6	А
	Traffic Control N C	EB	41.2	D	41.9	D	42.1	D
West Shore Road &	6	NB	13.5	В	13.7	В	13.8	В
Northern Boulevard	3	SB	20.1	С	20.5	С	20.6	С
		Overall	27.4	С	27.9	С	28.0	С
		EB	16.3	В	16.4	В	16.5	В
Old Northern	c	WB	19.0	В	19.2	В	19.3	В
Street/ Tower Place	5	NB	46.6	D	50.4	D	50.7	D
		Overall	29.8	С	31.4	С	31.5	С
		EB	13.8	В	13.9	В	13.9	В
Beacon Hill Road &	S	WB	12.0	В	12.0	В	12.0	В
Longview Road /		NB	6.2	А	6.2	А	6.3	А
Summit Road		SB	6.0	А	6.0	А	6.1	А
		Overall	7.2	А	Norbanic 2024 Delay LOS Delay LOS 34.8 D 19.1 C 0.0 A 9.0 A 41.7 D 41.7 D 0.0 A 0.0 A 5.4 A 5.5 A 10.1 B 10.2 B 8.5 A 8.6 A 41.9 D 42.1 D 13.7 B 13.8 B 20.5 C 20.6 C 27.9 C 28.0 C 16.4 B 16.5 B 19.2 B 19.3 B 50.4 D 50.7 D 31.4 C 31.5 C 13.9 B 13.9 B 12.0 B 12.0 B 6.2 A 6.3 A 6.0 A 6.1 A	А		
Port Washington		EB	40.5	D	40.8	D	40.9	D
		WB	38.2	D	38.1	D	37.6	D
Boulevard & Main	s	NB	21.4	С	22.0	С	23.4	С
Street		SB	33.1	С	33.3	С	35.5	D
		Overall	30.5	С	30.9	С	32.2	С
		WB	40.8	D	40.7	D	41.8	D
Port Washington	c	NB	6.9	А	6.9	А	7.2	А
Hill Road	3	SB	18.3	В	18.5	В	19.1	В
		Overall	17.6	В	17.7	В	18.5	В
		EB	22.1	С	23.2	С	19.1 C 9.0 A 41.7 D 0.0 A 5.5 A 10.2 B 8.6 A 42.1 D 13.8 B 20.6 C 28.0 C 13.8 B 50.7 D 31.5 C 13.9 B 6.3 A 40.9 D 37.6 D 23.4 C 35.5 D 32.2 C 41.8 D 7.2 A 19.1 B 18.5 B 23.7 C 21.1 C 17.8 B 14.4 B 21.1 C 17.8 B 16.4 C 16.5 C 15.6 C </td <td>С</td>	С
		WB	19.4	В	20.1	С	21.1	С
Main Street & Bayles Avenue	S	NB	17.8	В	17.8	В	17.8	В
Sujico Arenae		SB	14.9	В	14.9	В	14.4	В
		Overall	19.9	В	20.6	0.0A 9.0 A 41.7 D 41.7 D 0.0 A 0.0 A 5.4 A 5.5 A 10.1 B 10.2 B 8.5 A 8.6 A 41.9 D 42.1 D 13.7 B 13.8 B 20.5 C 20.6 C 27.9 C 28.0 C 16.4 B 16.5 B 19.2 B 19.3 B 50.4 D 50.7 D 31.4 C 31.5 C 13.9 B 13.9 B 12.0 B 12.0 B 6.2 A 6.3 A 6.0 A 6.1 A 7.3 A 7.3 A 40.8 D 40.9 D 22.0 C 23.4 C 23.3 C 35.5 D 30.9 C 32.2 C 40.7 D 41.8 D 6.9 A 7.2 A 18.5 B 19.1 B 17.7 B 18.5 B 23.2 C 23.7 C 20.1 C 21.1 C 17.8 B 17.8 B 14.9 B 14.4 B 20.6 C 21.1 C 16.2 C 16.4 C 16.2 C 16.4 C 16.2 C 16.4 <td< td=""><td>С</td></td<>	С	
South Bayles		WB	12.6	В	12.8	В	12.9	В
Avenue &		NB	15.8	С	16.2	С	16.4	С
Vanderventer	AWSC	SB	15.8	С	16.2	С	16.5	С
Avenue		Overall	15.0	В	LOS Delay LOS Delay D 34.8 D 19.1 A 0.0 A 9.0 D 41.7 D 41.7 A 0.0 A 0.0 A 5.4 A 5.5 A 10.1 B 10.2 A 8.5 A 8.6 D 41.9 D 42.1 B 13.7 B 13.8 C 20.5 C 20.6 C 27.9 C 28.0 B 16.4 B 16.5 B 19.2 B 19.3 D 50.4 D 50.7 C 31.4 C 31.5 B 13.9 B 13.9 B 13.9 B 13.9 B 12.0 A 6.1 A 6.2 A 6.3 A	С		
Port Washington		WB	13.7	В	13.8	В	13.9	В
Boulevard & Longview Road	TWSC	SB L	11.5	В	11.6	В	11.7	В

Table 3-15 LOS Summary—Study Intersections—Weekday AM Peak Hour

S= Signalized, TWSC = Two-Way Stop Controlled, AWSC=All-Way Stop Controlled

Weekday PM Peak Hour

As shown in **Table 3-16**, for the weekday PM peak hour, the northbound approach to the intersection of Old Northern Boulevard and Main Street/Tower Place operates at LOS F in all three conditions. The increase in approach delay between the No-Build and Build conditions is four seconds of average vehicle delay. The intersection currently operates at overall intersection LOS D. This level of service will be maintained through the No-Build and Build conditions. Since the LOS F on the northbound approach is an existing condition with little increase in approach delay and the intersection maintains overall intersection LOS D conditions through the Build scenario, no mitigation is recommended as a result of the Proposed Project.

Table 3-16 shows that all other signalized intersections will operate at the same approach and overall intersection LOS during the Build and No-Build conditions except for the southbound approach at the Port Washington Boulevard and Main Street where the overall intersection shows a drop in LOS from LOS C (No-Build) to LOS D (Build) based on an increase in delay of less than two seconds. However, given that all intersections show an overall LOS D or better, which is considered acceptable, no improvements are proposed or necessary.

The capacity analysis shows that at the existing two-way stop-controlled intersection of West Shore Road and the Site Access, the westbound approach operates at LOS E and the southbound left- turn movement operates at LOS A in Existing and No-Build conditions. During the Build conditions, the westbound approach operates at LOS C and the southbound left turn movement operates at LOS A in the Build condition. Under Existing and No-Build conditions, there are no exiting right-turn movements from the Site Access, so the average delay per vehicle for the westbound approach is based on only the exiting left-turn volume. Whereas in the Build condition due to the addition of right-turning movements, the average delay per vehicle is based upon the volume making both left and right-turn movements out of the site. In addition, during the Build condition there is a lower percentage of heavy vehicles due to the redevelopment of the site from an industrial to a residential use. These factors contribute to the reduced delay on the Site Access approach between the No-Build and Build conditions.

The capacity analysis shows that the westbound and southbound left turn movements at the Port Washington Boulevard and Longview Road intersection operates well at LOS C and B, respectively in the Existing, No-Build and Build conditions.

The three approaches to the all-way stop controlled intersection of South Bayles Avenue and Vanderventer Avenue operate well at a LOS A in Existing, No-Build and Build conditions with no changes in LOS between the Build condition and the No-Build conditions.

Given the low increases in delay and acceptable LOS (LOS D or better) at each of the unsignalized study intersections, no improvements are recommended.

		· ·						
	Traffic	Approach/	Existing	2021	No-Build	2024	Build 2	024
Intersection	Control	Movement	Delay	LOS	Delay	LOS	Delay	LOS
West Shore Road &		WB	38.5	E	39.4	E	19.9	С
Site Access	TWSC	SB L	0.0	А	0.0	A	9.0	А
		EB	39.0	D	38.9	D	38.9	D
West Shore Road &		WB	0.0	А	0.0	А	0.0	А
Harbor Park Drive	S	NB	6.6	А	6.7	А	6.8	А
S./Transfer Station		SB	14.0	В	14.3	В	14.4	В
		Overall	15.5	В	15.7	В	15.7	В
		EB	47.3	D	47.7	D	47.6	D
West Shore Road &	c	NB	9.7	А	10.0	В	10.1	В
Northern Boulevard	5	SB	18.7	В	0.0 A 0.0 A 6.7 A 6.8 A 14.3 B 14.4 B 15.7 B 15.7 B 47.7 D 47.6 D 10.0 B 10.1 B 19.3 B 19.4 B 20.5 C 20.6 C 20.6 C 20.8 C 16.2 B 16.2 B 94.4 F 98.4 F 41.2 D 42.4 D 14.7 B 11.7 B 11.7 B 11.7 B 7.5 A 7.8 A 5.7 A 5.8 A 4.5.7 A 5.8 A 4.9.5 D 51.9 D 44.5 D 43.0 D 24.1 C 25.6 C 34.0			
		Overall	20.1	С	20.5	С	20.6	С
		EB	20.3	С	20.6	С	20.8	С
Old Northern	c	WB	16.1	В	16.2	В	16.2	В
Street/ Tower Place	5	NB	86.4	F	94.4	F	98.4	F
·		Overall	38.7	D	41.2	D	42.4	D
		EB	14.7	В	14.7	В	14.7	В
Beacon Hill Road &		WB	11.8	В	11.7	В	11.7	В
Longview Road /	S	NB	7.4	А	7.5	А	7.8	А
Summit Road		SB	5.6	А	5.7	А	5.8	А
		Overall	8.1	9.7A10.0B118.7B19.3B120.1C20.5C220.3C20.6C216.1B16.2B186.4F94.4F938.7D41.2D414.7B14.7B111.8B11.7B17.4A7.5A35.6A5.7A38.1A8.2A849.5D49.5D423.4C24.1C233.3C34.0C333.1C34.0C39.9A10.0B120.6C21.2C217.4B17.5B1	8.3	А		
		EB	49.5	D	49.5	D	51.9	D
Port Washington		WB	44.4	D	44.5	D	43.0	D
Boulevard & Main	s	NB	23.4	С	24.1	С	25.6	С
Street		SB	33.3	С	34.0	С	35.5	D
		Overall	33.5	С	34.0	С	35.5	D
		WB	33.1	С	32.8	С	32.1	С
Port Washington	c	NB	9.9	А	10.0	В	10.8	В
Beacon Hill Road	3	SB	20.6	С	21.2	С	21.6	С
		Overall	17.4	В	17.5	В	17.9	В
		EB	15.4	В	15.7	В	16.2	В
		WB	14.9	В	15.2	В	15.5	В
Main Street & Bayles Avenue	S	NB	16.4	В	16.5	В	16.5	В
24):007.001.40		SB	15.4	В	15.4	В	15.4	В
		Overall	15.3	В	15.5	F 98.4 F D 42.4 D B 14.7 B A 7.8 A A 7.8 A A 5.8 A A 5.8 A A 5.8 A D 43.0 D C 25.6 C C 35.5 D B 10.8 B C 32.1 C D 6 B 10.8 B B 10.8 B B C 21.6 C 33.5 B B 16.2 B B B B 16.5 B B B B 15.4 B<		
South Bayles		WB	7.6	А	7.7	А	7.7	А
Avenue &		NB	7.8	А	7.8	А	7.9	А
Vanderventer	AWSC	SB	8.3	А	8.3	А	8.4	А
Avenue		Overall	8.0	A	8.0	A	8.1	A
Port Washington		WB	20.2	С	21.1	С	19.1	С
Boulevard & Longview Road	TWSC	SB L	12.3	В	12.5	В	12.5	В

Table 3-16 LOS Summary—Study Intersections—Weekday PM Peak Hour

S= Signalized, TWSC = Two-Way Stop Controlled, AWSC=All-Way Stop Controlled

Saturday Midday Peak Hour

Table 3-17, below, indicates that during the Saturday midday peak hour, the northbound approach at the intersection of Old Northern Boulevard and Main Street/Tower Place operates at LOS E during all three conditions. The increase in approach delay between the No-Build and Build conditions is less than four seconds. The intersection currently operates at overall intersection LOS C conditions which will be maintained through the No-Build and Build conditions.

The TIS indicates that all other signalized intersections will operate at the same approach and overall intersection LOS during the Build condition and No-Build condition, except for the southbound approach at the Port Washington Boulevard and Main Street intersection which shows a change in LOS from the No-Build (LOS B) condition to the Build (LOS C) condition due to an increase in delay of less than one second. However, given that all intersections show an overall intersection LOS D or better which is considered acceptable, no improvements are proposed.

Additionally, the capacity analysis shows that at the existing two-way, stop-controlled intersection of West Shore Road and the Site Access, the westbound approach and the southbound left turn movement operates at LOS A in Existing and No-Build conditions. During the Build condition, the analysis shows the westbound approach operates at LOS B and the southbound left-turn movement operates at LOS A. The capacity analysis shows that the westbound and southbound left turn movements at the Port Washington Boulevard and Longview Road intersection operate well at LOS D and B, respectively in the Existing, No-Build and Build conditions.

The three approaches to the all-way stop controlled intersection of South Bayles Avenue and Vanderventer Avenue operate well at a LOS A in Existing, No-Build and Build conditions with no changes in LOS between the No-Build and Build conditions.

Given the low increases in delay and acceptable LOS (LOS D or better) at each of the unsignalized study intersections, no improvements are recommended.

	Traffic	Approach/	Existing	Existing 2021		No-Build 2024		Build 2024	
Intersection	Control	Movement	Delay	LOS	Delay	LOS	Delay	LOS	
West Shore Road	TWSC	WB	0.0	А	0.0	А	14.2	В	
& Site Access		SB L	0.0	А	0.0	А	8.6	А	
	S	EB	40.6	D	40.6	D	40.6	D	
West Shore Road		WB	38.7	D	38.6	D	38.6	D	
& Harbor Bark Drive		NB	3.4	А	3.4	А	3.4	А	
S./Transfer Station		SB	6.7	А	6.8	А	6.8	А	
		Overall	7.1	А	7.1	А	7.1	А	
	S	EB	44.1	D	44.4	D	44.6	D	
West Shore Road		NB	7.7	А	7.8	А	7.9	А	
& Northern Boulevard		SB	13.6	В	13.9	В	14.1	В	
		Overall	18.3	В	18.5	В	18.7	В	
	S	EB	15.5	В	15.4	В	15.4	В	
Old Northern		WB	16.8	В	16.8	В	16.8	В	
Street/ Tower Place		NB	55.2	E	62.7	E	65.8	E	
		Overall	29.1	С	31.5	С	32.5	С	
	S	EB	14.0	В	14.0	В	14.0	В	
Beacon Hill Road &		WB	12.0	В	12.0	В	12.0	В	
Longview Road /		NB	5.9	А	5.9	А	6.1	А	
Summit Road		SB	5.4	А	5.5	А	5.6	А	
		Overall	7.3	А	7.3	А	Delay 14.2 8.6 40.6 38.6 3.4 6.8 7.1 44.6 7.9 14.1 18.7 15.4 65.8 32.5 14.0 15.4 16.8 33.9 33.9 33.9 33.9 33.9 32.4 20.3 15.2 16.2 7.7 20.3 315.2 16.2 7.7 20.3 15.2 16.2 7.7 20.3 15.2 16.2 7.7 28.0 7.7 28.1 16.9 7.7 8.2 7.9 28.7 11.8	А	
	S	EB	33.7	С	33.7	С	33.9	С	
Port Washington		WB	39.1	D	39.1	D	37.7	D	
Boulevard & Main		NB	21.0	С	21.5	С	22.8	С	
Street		SB	30.1	С	30.6	С	32.4	С	
		Overall	27.8	С	28.1	С	29.1	С	
	S	WB	28.9	С	28.6	С	28.0	С	
Port Washington		NB	7.4	А	7.4	А	7.7	А	
Boulevard & Beacon Hill Road		SB	19.4	В	19.7	В	20.3	С	
		Overall	14.8	В	14.9	В	15.2	В	
	AWSC	EB	15.5	В	15.8	В	16.2	В	
		WB	16.9	В	17.3	В	17.8	В	
Main Street & Bayles Avenue		NB	16.5	В	16.5	В	16.6	В	
Bayles / Wellac		SB	15.8	В	15.8	В	15.8	В	
		Overall	16.2	В	16.5	В	16.9	В	
South Bayles	TWSC	WB	7.6	А	7.6	А	7.6	А	
Avenue &		NB	7.7	А	7.7	А	7.7	А	
Vanderventer		SB	8.1	А	8.1	A	8.2	А	
Avenue		Overall	7.9	А	7.9	А	7.9	А	
Port Washington	TWSC	WB	28.9	D	30.0	D	28.7	D	
Boulevard & Longview Road		SB L	11.6	В	11.8	В	11.8	В	

Table 3-17 LOS Summary—Study Intersections—Saturday Midday Peak Hour

S= Signalized, TWSC = Two-Way Stop Controlled, AWSC=All-Way Stop Controlled

3.6.3.6 Parking

The Town Code requires that 2.25 parking spaces be provided for each residential dwelling. On that basis, the proposed 176 dwelling units would require 396 spaces. In addition, 32 stalls are required by Town Code for the proposed marina (1 stall per slip [assumed 29] + 1 stall for each of 3 employees). As shown on the Site Plan, a total of 300 parking spaces will be provided for the site, which includes 242 spaces within the indoor parking levels under the building and 58 surface spaces to be shared by the marina and visitors to the public promenade and pier. This surface parking is permitted based on Town of North Hempstead Town Board Resolution #454-2008 (Appendix B). This resolution provides that, in exchange for the Town's acquisition of a parcel (tax lot 1003) then owned by the owner of the Subject Property to complete its shore-line trail, the Town would authorize a portion of the parking lot on tax lot 1035 to be used for vehicular parking for the Subject Property "for the purpose of complying with the parking requirements under any applicable zoning ordinance" if the Subject Property is re-zoned or utilized in a manner consistent with the Port Washington Vision Plan. It specifically contemplated a "private development with limited public access to the waterfront" including features such as a shorefront promenade or esplanade with benches" as is provided in this development.

Based on the foregoing, the Applicant is seeking a variance from the Town BZA to approve parking below the Code-prescribed levels. To demonstrate the adequacy of the proposed 300 parking spaces, data from *Parking Generation*, *5th Edition* published by ITE, which contains parking demand data for a wide range of land use categories, which in the case of this proposed development would be Land Use Code #221 "Multifamily Housing (Mid-Rise), was used in the evaluation.

The ITE data indicate that the greatest parking demand for the multi-family residential use occurs in the overnight hours on a weekday, with the average peak parking demand rate of 1.31 parking spaces per dwelling unit. Based on this ratio, the peak parking demand would be 231 parking spaces, which is satisfied by the 242 indoor spaces within the building. The remaining 58 surface stalls satisfy the marina code requirement of 32, with additional spaces for visitors to the public spaces. The ITE peak parking demand rate for weekend parking (1.22) is lower than on weekdays, so the weekday condition is more critical, and is satisfied by the proposed 300 parking spaces.

The proposed parking will serve the peak needs of the proposed development with parking also available for the public spaces. All parking associated with the marina and public spaces would occur in the surface parking areas while the peak parking demands of the residents can be met with the indoor parking.

3.6.3.7 Site Access and Internal Circulation

Site Access

In the Build condition, access to the Subject Property will be provided at the proposed driveway directly onto West Shore Road. The driveway will be designed to provide safe and efficient features for vehicular movements into and out of the Subject Property.

For drivers approaching the site from the north, the existing southbound left-turn lane will be extended to the south to the proposed site access location. The length of the modified

left-turn lane will be of adequate length for vehicles waiting to make a left turn into the site. For drivers approaching the site from the south, vehicles will be able to make a right turn directly into the site.

For drivers leaving the site, one exit lane will be provided which will consist of a shared lane for left turns and right turns. The site exit will be STOP-controlled and striped with a stop bar pavement marking to reinforce the regulation.

Sight Distance

Near the site driveway, West Shore Road is relatively straight with a consistent grade. Although the proposed site access is shifting slightly to the south of the existing driveway, it is not an appreciable difference that will have a significant impact on sight distance. Therefore, it appears there is adequate stopping sight distance for northbound and southbound vehicles, in accordance with the standards set forth in the "Highway Design Manual" published by the NYSDOT and the "Policy on Geometric Design of Highways and Streets" published by the American Association of State Highway and Transportation Officials (AASHTO).

Bicycle and Pedestrian Accommodations

Based on a review of the "Long Island Bikeways & Trailways Map" published by NYSDOT, and as confirmed by field observations, there are no signed bicycle routes or shared bicycle routes along West Shore Road. However, connections between the site and the adjoining Town and County parks will facilitate pedestrian and bicycle access between these locations. A sidewalk exists along the east side of West Shore Road which will be retained to encourage bicycle use by the residents, and bike storage facilities will be provided within the building. It is also noted that the surface parking stalls to be provided as part of the redevelopment are intended for public use, with convenient pedestrian connections provided to the public pier and promenade at the rear (east) of the proposed residential building.

Emergency Vehicle and Truck Access

The on-site circulation layout, which will be subject to approval by the Nassau County Fire Marshal and the Port Washington Fire Department, has been designed to facilitate the movement of emergency vehicles. The layout will also accommodate the on-site circulation of moving vans, refuse trucks and delivery vehicles.

Public Transportation

To address the travel needs of the West Shore Residences, the applicant will provide a shuttle bus to the Port Washington LIRR station, as well as to the Port Washington shopping area along the Main Street corridor. This shuttle service will reduce automobile trips in the area; however, to present a conservative estimate of the potential impacts to traffic conditions, no credit was taken for the use of the shuttle bus in reducing trips generated by the Proposed Project. See **Section 3.6.2**, above for a discussion of commuter parking facilities.
3.6.3.8 Construction-Related Impacts

The large construction vehicles necessary for the site development will initially be brought to the Subject Property but then will remain there until completion of the work. These larger vehicles will not be travelling back and forth on a daily basis, unlike the contractor's workforce vehicles, which will primarily be passenger vehicles or pick-up trucks, which will be going to and from the site as the work progresses.

It is anticipated that the Proposed Project will be constructed in a single phase. Typically, the contractor's workforce arrives prior to the weekday AM peak hour of traffic and leaves prior to the weekday PM peak hour of traffic, thus minimizing overlap with the busier traffic flows on the surrounding roadway network.

It is not anticipated that traffic detours will be necessary, since the only significant work within the West Shore Road right-of-way will be the entrance construction and some utility work, which will be short-term in nature and would not necessitate any full closure of West Shore Road.

3.6.3.9 Impacts on Trucking Operations

Based on the foregoing capacity analyses, the site-generated traffic volumes will not significantly impact the level of service conditions at any of the key intersections included in the study area. Therefore, the trucking operations at the adjoining industrial property and nearby Seaview and Harbor Park industrial parks along West Shore Road will not be affected by the proposed development.

3.6.3.10 Impacts of Marina on Boat Traffic/Mooring Infrastructure

The impact on the existing recreational boat traffic and existing mooring infrastructure will be negligible. The proposed marina comprises slips that shall be solely for the use of the upland owners (with the exception that one slip will be dedicated to Town emergency service provider use) and comprise 500 linear feet of dock length. This represents an increase of 12 percent when compared with the 3,715 linear feet of dock within Glenwood Landing Marina and 11 percent increase of the total dock (4,365 LF) located within marinas of lower Hempstead Harbor. Regarding slip quantity, the proposed marina will provide up to 30 berths. This represents a 10.5 percent increase when compared to Glenwood Landing Marina (262 slips) and the total within lower Hempstead Harbor (285 slips). This impact is further minimized by recreational vessels launched from the Harry Tappen Beach public boat ramp, on the other side of the Harbor. It is important to note, all boats are not in use concurrently. On average, a recreational vessel is used 1.8 hours per day during the summer months. The proposed 30± recreational vessels represent an additional 54 boat-hours of traffic with only a portion of this use on lower Hempstead Harbor.

With respect to the adjacent barging operations, the proposed marina does not infringe into the neighbors accessway to navigable water as defined by NYS State Law 9 NYCRR Part 274. It is understood that a vessel harbored at the neighbor's property may cross into the accessway to navigable waters seaward of the proposed marina—however, this use is one of convenience. Similarly, recreational vessels harbored at the proposed marina or elsewhere, may cross into the accessway utilized by the adjacent barging operations. It is without question the responsibility of each vessel captain to safely navigate NY waters. However,

potential navigational aids placed into the waters seaward of the adjacent barging operations could assist captains to maintain safe clearance.

Similarly, the recreational non-motorized watercraft currently launched from the public park beach also maintain access to navigable waters with the rowing club having access to public rowing pier that is positioned well-distant from the proposed marina.

3.6.3.11 Conclusions

Based on the results of the analyses conducted for the purpose of this report, the following conclusions have been developed.

- > The Proposed Project would result in a minor increase in traffic volumes. When split by direction, the Proposed Project results in one additional vehicle every two minutes traveling on West Shore Road. The traffic generated by the Proposed Project can be accommodated on the adjacent roadways and intersections without significant negative impacts to traffic conditions.
- > The proposed site access plan is well developed, sufficient to serve the needs of the site and will operate well with low delays.
- > The Proposed Project is not expected to unduly influence the rate of crash occurrence in the study area.
- > The analysis performed shows that the project-generated traffic will result in no significant impact on the study intersections identified for this study. The study intersections will continue to operate similarly to the No Build condition with minimal increases in overall delay.
- > The parking to be provided for the site exceeds the projected peak parking demand based upon industry standards and is sufficient to meet the needs of the residences, the marina, and the public spaces.

3.6.4 Proposed Mitigation

The Proposed Project will not result in a significant adverse impact on the surrounding roadway network and no mitigation measures are warranted or proposed.

However, as noted above, the Applicant will provide a shuttle bus to the Port Washington LIRR station, as well as to the Port Washington shopping area along the Main Street corridor, which would reduce automobile trips in the area.

3.7 Community Facilities and Services

3.7.1 Existing Conditions

3.7.1.1 Sewage Disposal

The Subject Property is not presently serviced by sanitary sewers. Moreover, the Subject Property is not located within the jurisdiction of the Port Washington Water Pollution Control District (WPCD) or any other municipal sewer district.

Within the Port Washington WPCD, sanitary waste is transported via 75 miles of gravity sanitary sewers and 17 sewage pump stations to the Port Washington Waste Water Treatment Plant (WWTP), goes through treatment then discharges into the Manhasset Bay. The Port Washington WPCD serves more than 28,000 residents and businesses in the greater Port Washington area, including the Village of Port Washington North, portions of the Village of Flower Hill and Baxter Estates. The Port Washington WPCD also treats sanitary waste from the Village of Manorhaven.

As previously mentioned, the Subject Property is not presently serviced by sanitary sewers but maintains portable bathrooms to accommodate the employees on-site. Therefore, the total amount of sewage generation on the Subject Property is unknown.

3.7.1.2 Water Supply

Potable water is currently supplied to the Subject Property by Port Washington Water District (PWWD). The PWWD serves approximately 30,000 residents through 9,408 service connections. Groundwater is pumped from 12 wells located at eight stations throughout the PWWD, which are drilled into the Upper Glacial, Magothy and Lloyd Aquifers. The district contains over 110 miles of water main, 1,089 fire hydrants and 24.25 gallons in storage capacity. The total water produced in 2020 was 1.32 billion gallons of water with a daily average of water treated and pumped being approximately 3.60 million gallons.⁸²

The Subject Property is currently connected to the PWWD for potable water. As the Subject Property is a materials storage use, water generation is minimal.

3.7.1.3 Port Washington Fire Department

The Subject Property is within the service area of the Port Washington Fire Department (FD), which provides fire protection and emergency medical services (EMS) to the Subject Property. The Port Washington FD consists of four separate companies each responsible for a different faucet of fire or EMS operations.⁸³ These companies consist of the Atlantic Hook and Ladder Co #1 providing ladder and heavy rescue, Protection Engine Co #1, and Flower Hill Hose Co #1, both engine companies; and Fire Medic Co #1, providing emergency medical services.

⁸² Port Washington Water District. Annual Drinking Water Quality Report for 2020. Available at: PWWD_Spring2020_Water_Quality_Report.pdf. Accessed July 2021.

⁸³ Port Washington Fire Department. *Department*. Available at: Department | Port Washington Fire Department (pwfd.com). Accessed July 2021.

Correspondence dated July 22, 2021 (**Appendix K**), was sent to the Port Washington FD, informing the Port Washington FD of the Proposed Project, and requesting information relative to fire protection services in the area of the Subject Property. A response dated August 3, 2021, was received from Deputy FOIL Officer, Christina Marvullo-Alexander of the Port Washington FD. The response indicates that the Port Washington FD is comprised of 275 volunteers, four maintenance and one administrator staff members, serving a population of 36,000 within 12 square miles. As mentioned above, the Port Washington FD consists of seven stations and substations throughout the Port Washington Peninsula, specifically:

- Atlantic Hook and Ladder Company #1 consists of one ladder, two engines and one rescue located at 25 Carlton Avenue, approximately a nine minute response time to the Subject Property
- Protection Engine Company #1 consists of one engine located at 14 South Washington Street, approximately a nine minute response time to the Subject Property
- > Flower Hill Hose Company #1 consists of one engine located at 12 Haven Avenue, approximately an eight minute response time to the Subject Property
- > Fire Medic Company #1 consists of two ambulances located at 65 Harbor Road, approximately a nine minute response time to the Subject Property
- Atlantic Hook and ladder Company #1 Annex consists of one ladder and one light rescue located at 21 Avenue A, approximately a nine minute response time to the Subject Property
- Protection Engine Company #1 Annex consists of one engine located at 25 Channel Drive, approximately a 11 minute response time to the Subject Property
- Port Washington Fire Department Headquarters consist of one ambulance located at 423 Port Washington Boulevard, approximately a seven minute response time to the Subject Property. The Port Washington FD is planning to renovate its business office located 423 Port Washington Boulevard; it is currently in the permitting phase.

The Port Washington FD has provided an inventory of its current apparatus and emergency medical services vehicles (**Appendix K**). The Port Washington FD indicated that its pumping capacity is 1,500/1,750 gallons per minute and the aerial equipment consists of a unit 8519 (107 feet) ladder 2011 Spartan and a unit 8517 (95 feet) ladder 2016 Spartan. The fire department has an insurance services office (ISO) rating of three out of ten; the lower an ISO number rating indicates a fire department is performing to a higher standard.

The Port Washington FD responded to 1,428 fire calls in 2020, 1,392 fire calls in 2019 and 1,543 fire calls in 2018. Additionally, the Port Washington FD responded to 2,210 rescue/EMS calls in 2020, 2,338 rescue/EMS calls in 2019, and 2,226 rescue/EMS calls in 2018. The Port Washington FD is affiliated with Northwell Health in Manhasset, New York, and Saint Francis Hospital in Roslyn, New York.

The fire department has indicated they are a part of the Nassau County Fire Service Mutual Aid Plan a part of the 8th Battalion consisting of the Albertson, East Williston, Great Neck Alert, Great Neck Vigilant, Plandome, Williston Park and Manhasset-Lakeville fire departments. The Mutual Aid Plan is located within **Appendix K** of this DEIS.

3.7.1.4 Port Washington Police Department

The Subject Property is within the service area of the Port Washington Police Department (PWPD). The PWPD is located at 500 Port Washington Boulevard in Port Washington, approximately 1.40 miles southwest of the Subject Property. The PWPD consists of 60 full-time sworn employees.⁸⁴

Correspondence was sent to the PWPD on July 22, 2021, requesting information regarding personnel, response time to the Subject Property, equipment, number of calls and additional information the PWPD believes would be of assistance in the preparation of the DEIS and in determining sufficient access for police protection. Follow-up correspondence was sent to Port Washington PD on August 31, 2021 (**Appendix K**). To date, no response has been received. Additional information regarding the PWPD will be provided once received from the Department.

3.7.1.5 Port Washington Union Free School District

The Subject Property is located within the Port Washington Union Free School District (UFSD). The Port Washington UFSD is composed of seven schools, an Administrative Annex located at 90 Avenue C and Administration Building, located at 101 Campus Drive.⁸⁵ The school district provides busing to and from public and private/parochial schools within the district for students living in a certain radius (described on the district's website) from the elementary, middle, and high schools.⁸⁶ The seven schools within the school district are as follows:

- > Paul D. Schreiber High School is located at 101 Campus Drive and comprises grades nine through twelve.
- > Carrie Palmer Weber Middle School is located at 52 Campus Drive and includes grades six through eight.
- > John J. Daly Elementary School is located at 36 Rockwood Avenue and contains kindergarten through fifth grade.
- > Guggenheim Elementary School is located at 38 Poplar Place and comprises kindergarten through fifth grade.
- > Manorhaven Elementary School is located at 12 Morewood Oaks and includes kindergarten through fifth grade.
- > John Philip Sousa Elementary School is located at 101 Sands Point Road contains kindergarten through fifth grade.
- > South Salem Elementary School is located at 10 Newbury Road and comprises kindergarten through fifth grade.

Based on publicly-available resources from the New York State Education Department (NYSED) and the Port Washington UFSD website for the 2020-2021 school year, the total

⁸⁴ Port Washington Police District. *Employment*. Available at: Port Washington Police District NY. Accessed July 2021.

⁸⁵ Port Washington Union Free School District. Available at: Port Washington UFSD / Port Washington School District (portnet.org). Accessed July 2021.

⁸⁶ Port Washington Union Free School District. *Transportation*. Available at: Transportation / Transportation (portnet.org). Accessed July 2021.

district enrollment for Port Washington UFSD was 5,472.⁸⁷ According to enrollment data for the past decade, as depicted in **Table 3-18**, the Port Washington UFSD has steadily increased in total enrollment.

School Year	Enrollment	Increase/Decrease (+/-)
2020-2021	5,472	+108
2019-2020	5,364	+8
2018-2019	5,356	-42
2017-2018	5,398	+18
2016-2017	5,380	+97
2015-2016	5,283	+107
2014-2015	5,176	+35
2013-2014	5,141	+50
2012-2013	5,091	+55
2011-2012	5,036	

Table 3-18 Port Washington UFSD Enrollment by Year

According to the 145 West Shore Road Fiscal Impact Analyses (**Appendix L**), the data found within the district's most recent school budget of 2021-2022, the average per pupil expenditure is approximately \$6,931 per student. Approximately 85 percent of this expenditure (\$5,884) is raised through the local tax levy.

Correspondence was sent to the School District's superintendent on July 22, 2021 requesting enrollment distribution by grade level, number of faculty and bus/student transportation system information pertaining to the school district. A follow up letter was sent August 31, 2021 and call was made to the School District's Assistant Superintendent on March 2, 2022. To date, no response has been received. Information from the School District will be incorporated once received.

Since the Subject Property is industrial, it does not generate any school-aged children as there is no permanent population.

3.7.1.6 Solid Waste Disposal

The Subject Property currently utilizes a private carter service for solid waste pick up and disposal. As the Subject Property is currently an active sand and gravel storage facility, the Subject Property produces a minimal amount of solid waste.

3.7.1.7 Private Utilities

Electricity and Natural Gas

The Subject Property currently receives electric service from PSEG Long Island. PSEG Long Island maintains distribution lines along West Shore Road directly adjacent to the Subject

⁸⁷ New York State Education Department. *New York State Property Tax Report Card*. Available at: New York State Property Tax Report Card : Educational Management : P-12 : NYSED. Accessed July 2021.

property, as well as on the Subject Property. The Subject Property is located within the service area of National Grid but does not use natural gas.

3.7.2 Potential Impacts

As per the Final Scope (**Appendix A**), reasonable alternative bedroom mix counts are analyzed in addition to the proposed program. The alternative bedroom mix counts are analyzed specifically for utility and infrastructure impacts, including sewage disposal, water supply, as well as for school-aged children for the School District. While the Proposed Action contains an almost even split between one- and two-bedroom units, one alternative leans toward more one-bedroom units (One-Bedroom Scenario) and the other toward more twobedroom units (Two-Bedroom Scenario). All of the scenarios contain a small number of three-bedroom units, and also include the proposed marina.

3.7.2.1 Projected Population

The Proposed Action includes 176 residential dwelling units that would result in a permanent residential population on the Subject Property. In order to determine the residential population that is expected to be generated, residential demographic multipliers published by Rutgers University, Center for Urban Policy Research (the "Rutgers Study") were used to derive the projected population.⁸⁸ As shown in **Table 3-19**, implementation of the Proposed Action is anticipated to generate a residential population of approximately 378 persons.

Unit	Unit Count	Factor	Total
One-bedroom	80	1.67 ¹	134
Two-bedroom	82	2.31 ²	190
Three-bedroom	14	3.81 ³	54
Total			378 persons

Table 3-19 Projected Population

Source: Rutgers University, Center for Urban Policy Research - Residential Demographic Multipliers Estimates of the Occupants of New Housing, New York (1-1) All Persons in Unit: Total Persons and Persons by Age.

¹ 5+ units - rent, 1BR more than \$1,000

² 5+ units - rent, 2BR more than \$1,100

³ 5+ units - rent, 3BR more than \$1,250

3.7.2.2 Sewage Disposal

As previously mentioned, the current sewage disposal on the Subject Property occurs via the use of on-site portable bathrooms.

As shown in **Table 3-20**, below, the total anticipated sewage flow from the proposed development is 46,650± gpd, based on the Nassau County Design Flow Standards.

⁸⁰ Rutgers University, Center for Urban Policy Research. Residential Demographic Multipliers Estimates of the Occupants of New Housing, New York (1-1) All Persons in Unit: Total Persons and Persons by Age. Accessed March 2022.

Land Use	Factor	Design Sewage Flow Rate (gpd)	Total Water Demand (gpd)
1-Bedroom	80 units	200 gpd/unit	16,000
2-Bedroom	82 units	300 gpd/unit	24,600
3-Bedroom	14 units	400 gpd/unit	5,600
Marina	30 slips	15 GPD/slip	450
Total Water Dema	nd		46,650± gpd ¹

Table 3-20 Projected Sanitary Wastewater

Source: Nassau County Department of Public Works Minimum Design Sewage Flow Rates

¹ The current proposed program differs from that when the initial will-serve request letter was submitted to the Port Washington WPCD due to the project being in its preliminary design stage.

As indicated in the table above, the total anticipated sewage flow from the Proposed Project based off the proposed program is 46,650± gpd. As shown in **Table 3-21** below, two potential alternative bedroom mix counts were analyzed in addition to the proposed marina in terms of wastewater generation.

Land Use	Factor	Design Sewage Flow Rate (gpd)	Total Water Demand (gpd)
One-Bedroom Scer	nario		
1-Bedroom	106 units	200 gpd/unit	21,200
2-Bedroom	69 units	300 gpd/unit	20,700
3-Bedroom	7 units	400 gpd/unit	2,800
Marina	30 slips	15 GPD/slip	450
Total Water Demar	nd		45,150± gpd
Two-Bedroom Sce	nario		
1-Bedroom	62 units	200 gpd/unit	12,400
2-Bedroom	97 units	300 gpd/unit	29,100
3-Bedroom	12 units	400 gpd/unit	4,800
Marina	30 slips	15 GPD/slip	450
Total Water Demar	nd		46,750± gpd

Table 3-21 Potential Alternative Bedroom Mix Projected Sanitary Wastewater

As identified in **Table 3-21**, the proposed program would generate less sanitary wastewater than the potential alternative two-bedroom scenario and approximately 1,500 gpd more than the potential alternative one-bedroom scenario.

The Subject Property is not located within the Port Washington WPCD. Therefore, the Applicant is exploring potential out-of-district connections with the Port Washington Water Pollution Control District, Nassau County Sewer District or another local sewer system.

Under the Proposed Action it is proposed that the residential building will connect to the Port Washington WPCD, Nassau County Sewer District or another local sewer district via construction of an on-site sewer main and lift station (pump station) on the southern end of the property. Consultations with the sewer districts noted above are expected to continue throughout the application process.

The calculations provided above for the projected sanitary wastewater accounts for the residential units within the development, as well as the amenities on the premises. This includes the swimming pool, laundry facilities and public fixtures in common areas. The unit calculations take into account amenities located within multi-family developments that are used only by residents and their guests.

3.7.2.3 Water Supply

As stated above, the Subject Property is currently supplied potable water by the PWWD. Upon implementation of the Proposed Action, it is expected that the Proposed Project would be served by PWWD. In that regard, correspondence was sent to the PWWD on November 3, 2020, regarding the availability of potable water from the PWWD (see **Appendix K**). A follow up letter was sent by the project attorney on September 13, 2021. To date, no formal response has been received. As shown in **Table 3-22** below, the Proposed Project is expected to generate a demand of 51,315± gpd of water.⁸⁹

Land Use	Factor	Design Sewage Flow Rate (gpd)	Total Water Demand (gpd)
1-Bedroom	80 units	200 gpd/unit	16,000
2-Bedroom	82 units	300 gpd/unit	24,600
3-Bedroom	14 units	400 gpd/unit	5,600
Marina	30 slips	15 GPD/slip	450
Total Water Demand without irrigation			46,650± gpd
Total irrigation (fa	ctor of 10%, see below)		4,665± gpd
Total water demar	nd with irrigation		51,315± gpd

Table 3-22 Projected Water Demand

The Proposed Action is projected to create a demand for approximately 4,665 gpd of water for irrigation purposes. Irrigation was calculated using a factor of ten percent of the expected 46,650± gpd of domestic water demand. In addition to the calculated water demand for the Proposed Action, two potential alternative bedroom mix counts were analyzed in addition to the proposed marina to identify potential projected water demand, **Table 3-23**.

⁸⁹ The current proposed program differs from that when the initial will-serve letter was submitted to the PWWD due to the project being in its preliminary design stage.

		Design Sewage	Total Water
Land Use	Unit	Flow Rate (gpd)	Demand (gpd)
One-Bedroom Sce	nario		
1-Bedroom	106 units	200 gpd/unit	21,200
2-Bedroom	69 units	300 gpd/unit	20,700
3-Bedroom	7 units	400 gpd/unit	2,800
Marina	30 slips	15 GPD/slip	450
Total Water Dema	nd		45,150± gpd
Total irrigation (fac	ctor of 10%, see below)		4,515± gpd
Total water demand with irrigation			49,665± gpd
Two-Bedroom Scenario			
1-Bedroom	62 units	200 gpd/unit	12,400
2-Bedroom	97 units	300 gpd/unit	29,100
3-Bedroom	12 units	400 gpd/unit	4,800
Marina	30 slips	15 GPD/slip	450
Total Water Demand			46,750± gpd
Total irrigation (fac	ctor of 10%, see below)		4,675± gpd
Total water deman	d with irrigation		51,425± gpd

As identified in **Table 3-23**, the proposed program would generate less total water demand (including irrigation) than the potential alternative two-bedroom scenario and approximately 1,650 gpd more than the potential alternative one-bedroom scenario's total water demand.

However, to reduce irrigation demand under the Proposed Action, rain sensors, low-flow fixtures, a cistern to capture rainwater, and the planting of some vegetative species with low-water dependency would be installed on the Subject Property. The Proposed Action would represent an average daily demand of approximately 51,315± gpd for combined domestic and irrigation water use. The estimated daily demand of water accounts for the residential units within the development, as well the amenities on the premises, including the swimming pool, laundry facilities and public fixtures in common-area spaces as the unit calculations take into account amenities located within multi-family developments that are used only by residents and their guests.

Discussions are ongoing with the PWWD regarding the analyses performed by the Applicant, the infrastructure required, and the measures needed to secure a letter of water availability; these discussions are expected to continue throughout the application process.

Under the Proposed Action, the fire protection system will consist of a fully sprinklered building with manual standpipes designed to meet NFPA 13 standards. Additionally, fire hose cabinet will be provided as required due to egress distance requirements. At a minimum a double check valve would be required on the fire service and a RPZ on the domestic service to meet the municipality, county and state backflow prevention requirements.

3.7.2.4 Fire Protection and EMS

As discussed above, the Port Washington FD serves the Subject Property, for fire protection and ambulance/EMS. It is expected that the Port Washington FD would continue to provide fire protection and ambulance/EMS to the Subject Property following redevelopment.

Access to the Subject Property would be accommodated by the construction of one internal driveway from West Shore Road, which would terminate within the proposed at-grade parking lot that also has direct access to the adjacent North Hempstead Beach Park parking lot. This roadway would be compliant with the dimensional requirements, regulations and standards for firefighting equipment and emergency service vehicle access, and full vehicular circulation would be provided throughout the Subject Property. Additionally, the Subject Property would accommodate accessing and staging for fire equipment within the property to access the roof and highest floors.

The Proposed Building would be constructed to the latest New York State Building and Fire Code and would be equipped with sprinklers and fire alarms. In designing the Proposed Building, the Applicant considered the height of the proposed parking area under the building to allow for emergency vehicle access to the ground floor. Where accessibility is limited, such as in partially subgrade parking areas, sprinklers and other fire suppression measures would be installed. As mentioned above, the proposed fire system will consist of a fully sprinklered building with manual standpipes designed to meet NFPA 13 standards and a fire hose cabinet will be provided as required due to egress distance requirements.

In its correspondence, the Port Washington FD did not indicate the need to acquire new equipment or apparatus to serve the Proposed Action. However, the Applicant is proposing to provide a dedicated boat slip for Town emergency service provider use. Additionally, as identified within **Section 3.15.3.3**, the Subject Property would generate taxes for the applicable taxing districts including the Port Washington FD. As such, the proposed taxes generated by the Subject Property would help to off-set costs incurred by the Port Washington FD.

No fuel storage is proposed for the marina. Additionally, the Proposed Project poses no other significant potential fire hazards.

Implementation of the Proposed Action is not anticipated to result in significant adverse impacts to fire protection services from the standpoint of building height, since the Fire Department maintains equipment that can reach the highest floors of the Proposed Building, as well as the roof, as described above.

Per the planning standards published in the Development Impact Assessment Handbook (ULI 1994), impacts to fire protection services are estimated at 1.65 fire personnel, 0.2 vehicles and 250 sf of facilities per 1,000 population. With a projected residential population of 378 residents, the Proposed Project would generate a demand for less than one additional volunteer associated with the fire department, less than one vehicle and approximately 94.5 sf of facility space to serve the population. As the ULI multipliers assume no existing services, actual demand is expected to be lower. The potential need for such personnel, vehicle and facility space represents a negligible impact to the resources of the Port Washington FD.

As demonstrated by this analysis, the Proposed Project is not expected to have a significant adverse impact on fire protection services.

3.7.2.5 Police Protection

As discussed above, the PWPD provides police protection to the Subject Property. Furthermore, correspondence was sent to the PWPD requesting information regarding personnel, response time to the Subject Property, equipment, number of calls and additional information the PWPD believes would be of assistance in the preparation of the DEIS and in determining sufficient access for police protection. Follow-up correspondence was sent to PWPD on August 31, 2021 (**Appendix K**). As indicated above, no response has been received to date.

Police protection services to the Subject Property from the PWPD would be supplemented by on-site security protection measures, including the presence of a doorman and superintendent, security cameras installed throughout the proposed development, security gates on entrances to the two-level parking garage, and exterior lighting. The Applicant is proposing to provide access to the residents' lounge for PWPD personnel during their shift changes and a dedicated boat slip for Town emergency service provider use. Additionally, as identified within **Section 3.15.3.3**, the Subject Property would generate taxes for the applicable taxing districts including the PWPD. As such, the proposed taxes generated by the Subject Property would help to off-set cost incurred by the PWPD.

Based on standards contained in the *ULI Development Impact Assessment Handbook,* two police officers and 0.6 police vehicle are required per 1,000 individuals. Based on these factors, 378 residents are projected to generate a need for less than one additional police personnel and vehicle, respectively. As the ULI multipliers assume no existing services, actual demand is expected to be lower.

Based on the foregoing, the Proposed Action would not have a significant adverse impact with respect to police protection.

3.7.2.6 Port Washington Union Free School District

As noted above, the Subject Property is located within the Port Washington UFSD. According to the 145 West Shore Road Fiscal Impact Analyses (Appendix K), in order to estimate the number of public school-aged children (PSAC) that would be generated by the Proposed Project, The Real Estate Institute at Stony Brook University (REI) 2019 report was analyzed. REI utilized CoStar's proprietary real estate database, randomly selected 14 multi-family apartment complexes (five within Nassau County and nine within Suffolk County) which were developed and occupied since 2003. Each apartment complex had a minimum of 200 units, and a total of 10 public school districts were associated with the 14 complexes.⁹⁰ Analyzing the number of PSAC at each of the 14 developments, the reported median number of PSAC per every 100 units of multi-family rental housing is eight. Therefore, based on the estimated PSAC multiplier median of 0.08 students per 100 units, it is estimated that the Proposed Project is to produce approximately 14 PSAC. As the PSAC is calculated based off a PSAC multiplier rather than bedroom mix, the request within the Final Scope of utilizing the alternative potential bedroom mix count scenarios is not feasible. However, knowing the total unit count for the potential alternative one-bedroom scenario is 182 units and the total of the potential alternative two-bedroom scenario is 171 units, the total PSAC under those scenarios would be 15 and 14, respectively. Therefore, until the potential alternative

²⁰ REI at Stony Brook University College of Business. Market Rate Apartment School Aged Children Study. April 2019

scenarios for bedroom mix, the total PSAC does not differ significantly. The introduction of 14 PSAC to the Port Washington UFSD would reflect a 0.25 percent increase in enrollment, based on the 2020-2021 total enrollment of 5,472 students. This degree of magnitude is well within the range of typical annual enrollment fluctuations that the Port Washington UFSD experiences.

As identified within **Section 3.15.3.3**, the Subject Property would generate taxes for the applicable taxing districts including the Port Washington UFSD. As such, the proposed surplus of taxes generated by the Subject Property would help to off-set the cost of providing services to the 14 PSAC generated by the Proposed Action.

As indicated above, information regarding the Port Washington UFSD was requested (**Appendix K**), but to date, information has not yet been provided.

Based on the foregoing, there will be no significant adverse impact on educational facilities within the Port Washington UFSD.

3.7.2.7 Solid Waste Disposal

As discussed above, solid waste generated on-site is carted and disposed off-site by a private carter. As the proposed development consists of a multi-family residence, the Proposed Action would not be eligible for municipal collection service and instead must retain a private carter. Therefore, similar to the existing use, solid waste would be carted off-site via private carter contracted by the Applicant. In addition, to solid waste generated on the Subject Property, recyclable materials would also be carted off-site. The estimated quantity of solid waste that would be generated by the Proposed Project has been calculated in **Table 3-24**, below.

Classification	Factor	Solid Waste	Solid Waste Generation
Household	378	3.5 lbs/day per capita	1,323 lbs/day
Leasing/Manager's Office	2,200 SF	1.0 lbs/100 SF	22 lbs/day
Total (lbs/day)			1,345± lbs/day
Total (tons/month)			20.5± tons/month

Table 3-24 Projected Solid Waste Generation

Source: Salvato, J. (2003). Solid Waste Management. In Environmental Engineering (5th ed.). Hoboken, N.J.: Wiley.

Based upon this analysis, the proposed development would generate approximately 1,345 pounds of solid waste per day (20.5± tons per month) at full occupancy. In 2018, the United States Environmental Protection Agency (EPA) identified a total generation of solid waste for the country was approximately 292.4 million with approximately 69 million tons recycled.⁹¹ Using that ratio of recycled materials to solid waste collected, it is estimated that the Proposed Project would generate approximately 4.92 tons/month of recyclable materials out of the total 20.5± tons/month of solid waste produced. Recycling disposal cans would be

⁹¹ United States Environmental Protection Agency. *The Current National Picture*. Available at: National Overview: Facts and Figures on Materials, Wastes and Recycling | US EPA. Accessed August 2021.

located throughout the development to promote recycling and reduce the volume of refuse to be disposed at a landfill or incinerator.

3.7.2.8 Private Utilities

Electricity and Natural Gas

PSEG Long Island will continue to provide service to the proposed residential development via connections through existing overhead distribution lines. In addition, as natural gas mains are located in the vicinity, National Grid will provide natural gas to the proposed development. Consultations are ongoing with both service providers to discuss service availability and demand.

Under the Proposed Action, it has been estimated that the demand for electricity at full occupancy would be 2,200,000 kilowatt-hour (kWh) annually and electrical loads are estimated to be 3,600 kilowatts (kW) connected, annually. Moreover, at full occupancy in terms of natural gas usage, the Proposed Action is estimated to use approximately 80,000 therms annually. Estimates for natural gas loads for the Proposed Project are projected at approximately 37,000 cubic feet per hour (CFH) connected including loads for the fireplaces/fire pits/grills, pool/spa heater, make-up air (MUA) consumption, natural gas generator, furnaces and gas ranges, plus 10 percent per sf.

Additionally, the Proposed Action includes the installation of a 40kW solar array to power common areas and parking areas, offsetting some of the electricity coming from the grid.

Overall, electricity and natural gas are expected to be available to the proposed residential development, and no significant adverse impacts to these utilities are anticipated. However, consultations will continue with these utilities throughout the application process.

3.7.3 Proposed Mitigation

No significant adverse impacts to community facilities and utilities have been identified. Therefore, no mitigation measures proposed, beyond what is outlined above. The Proposed Action is expected to benefit community facilities with respect to increased tax revenues that would be generated by the new improvements (see **Section 3.15** of this DEIS regarding fiscal impacts). The Proposed Action also includes proposed benefits to the Port Washington FD and PWPD. However, to minimize potential adverse impacts to community facilities and utilities, the following will occur:

- > Increased demand on community services due to the Proposed Action would be partially offset by additional property tax revenues generated by the new improvements.
- > The Proposed Building would be constructed to the latest New York State Building and Fire Code.
- > The Proposed Building would be sprinklered, and fire alarms would be installed.
- > The Proposed Project would include a sewer main and pump station to accommodate the residential building.
- Rain sensors, low-flow fixtures a rainwater cistern, and the planting of some vegetative species with low-water dependency would be installed on the Subject Property to reduce water demand.

- > The Applicant would provide access to the residents' lounge during shift changes for the PWPD, as well as a dedicated boat slip for Town emergency service provider use.
- > The Proposed Project would include the installation of a 40 kW per day solar array to power common areas and parking areas to offset electricity coming from the grid.

3.8 Noise

3.8.1 Regulatory Framework

3.8.1.1 New York State Department of Environmental Conservation

To comply with Article 8 of the New York State Environmental Conservation Law and 6 NYCRR Part 617 regulations, noise impact must be evaluated as a potential issue in making a determination of environmental significance. The NYSDEC has issued a program policy Assessing and Mitigating Noise Impacts, which provides guidance on the methods to assess potential noise impact and avoid or reduce significant adverse impacts for fulfillment of SEQRA regulations. The SEQRA process and the NYSDEC noise policy focus on noise that would be generated by the Proposed Project and activities that are within the control of the property owner. The goal for any permitted operation is to minimize increases in noise levels. Potential noise impacts for existing receptors in the study area have been assessed according to the methods described in this program policy. The NYSDEC program policy does not supersede any local noise ordinances or regulations.

Table 3-25 presents the thresholds for significant increase in noise level and the NYSDEC program policy on determining the need for mitigation from long-term operations. Changes in future noise conditions are typically evaluated according to hourly-equivalent (Leq) levels. According to the policy, limiting maximum noise levels may be appropriate in some circumstances. For example, in non-industrial settings, a proposed action should generally not raise ambient levels above 65 dBA.

Noise Level Increase (dB)	Impact Determination	Need for Mitigation
0 to 3	No impact	None
3 to 6	Potential adverse impact for the most sensitive receptors	Mitigation may be needed for the most sensitive receptors.
6 to 10	Potential adverse impact depending on existing noise level and character of land use	Mitigation is generally needed for most residential receptors.
10 or more	Adverse impact	Mitigation is warranted where reasonable.

Table 3-25 NYSDEC Guidelines for Assessing Noise Impact and Mitigation

Source: Adapted from NYSDEC Noise Policy, 2001, VHB.

When a noise study indicates that the proposed action may result in a significant impact, the NYSDEC's policy recommends the Applicant implement reasonable and necessary measures to mitigate or eliminate the adverse impacts. In addition to physical mitigation measures

such as noise barriers, the Applicant should also consider best management practices (BMPs) to reduce noise by means of modifying noise-generating equipment or activities, limiting the period of time or duration of noisy operations or relocating noise sources farther away from sensitive receptors.

3.8.1.2 Town of North Hempstead Noise Ordinance

The Town of North Hempstead Noise Ordinance (Chapter 38 of the Town Code⁹²) provides a list of prohibited acts that can generate a noise disturbance, as defined below. The ordinance states that no person shall make, continue, or cause to be made or continued any noise disturbance at any time.

Noise is defined by the Town as any sound which annoys or disturbs humans, or which causes or tends to cause an adverse psychological or physiological effect on humans. Noise Disturbance is defined as any sound which endangers or injures the safety or health of humans or animals or annoys or disturbs a reasonable person of normal sensitivities or endangers or injures personal or real property.

The Town Code also specifies restrictions for construction activities:

- > Between the hours of 6:00 p.m. the previous day and 7:30 a.m., weekdays, and at any time on weekends or holidays, such that the sound therefrom creates a noise disruption across a residential real property boundary or within a sound-sensitive zone, except for cases of urgent necessity in the interest of public safety and then only with an extended construction hours permit from the Building Department, which permit may be renewed for a period of three days or less while the emergency continues, or public service utilities.
- > Construction activity on Saturdays between the hours of 9:00 a.m. and 6:00 p.m. may be allowed in business and industrial zoning districts upon issuance of an extended construction hours permit from the Building Department when such activity does not create or is not likely to create a noise disruption across a residential real property boundary or within a sound-sensitive zone. The Building Department may revoke an extended construction hours permit once issued if the sound from such construction activity creates or becomes likely to create a noise disruption across a residential real property boundary or within a sound-sensitive zone.

3.8.2 Noise Background

Sound is the effect of small fluctuations in air pressure above and below atmospheric pressure. Noise is typically defined as unwanted or undesirable sound. Noise has the potential to cause human annoyance and can also interfere with normal activities such as sleep or speech. The parameters of noise that typically relate to human annoyance are the intensity or level, frequency content, and the variation with time as described below:

Level—Sound levels are most often measured on a logarithmic scale of decibels (dB). As shown in Table 3-26 below, the decibel scale compresses the audible acoustic pressure levels which can vary from the threshold of hearing (0 dB) to the threshold of pain (120)

⁹² Chapter 38, Noise, *Adopted by the Town Board of the Town of North Hempstead 10-21-2003 by L.L. No. 13-2003.* Amendments noted where applicable. (See https://ecode360.com/9297145).

dB). Sound levels generally correspond to perceived loudness. Because the sensitivity of human hearing varies with frequency, the A weighting system is used when measuring environmental sound to provide a single number descriptor (dBA) that correlates with human subjective response.

- Frequency—Sound is comprised of acoustic energy distributed over a range of frequencies. The frequency content of sound is characterized by its tone or pitch and is measured according to the rate of air pressure fluctuations in cycles per second (or Hertz).
- > Variation in Time—Because sound levels fluctuate from moment to moment, it is important to characterize the range of levels that may exist over a period of time. This is commonly done by using the following sound level metrics:
 - Leq is the energy-average sound level. The Leq is a single value that is equivalent in sound energy to the fluctuating levels over a period of time. Therefore, the Leq takes into account how loud events are during the period, how long they last, and how many times they occur. Leq is commonly used to describe environmental noise and relates well to human annoyance.
 - Ldn (or DNL) is the day-night average sound level. The Ldn or DNL is a value that represents the sound level over a 24-hour period with a 10-dB penalty applied to sound that occurs between 10:00 p.m. and 7:00 a.m. when people are more sensitive to noise. Similar to Leq, it takes into account how loud events are, how long they last, how many times the occur and whether they occur at night.
 - Lmax is the maximum instantaneous A-weighted sound level. The Lmax represents the highest sound level generated by a source. For sources that generate relatively constant sound, the Lmax is similar to the Leq. For sources that generate variable or intermittent sound, the Leq is lower than the Lmax.
 - Statistical sound levels, such as L10, L50, and L90, describe the sound levels which are exceeded for that percent of time during a given time period. For example, the L10 sound level represents the higher end of the range of sound levels since sound only exceeds that level 10% of the time. Conversely, the L90 sound level represents the lower end of the range of sound levels. The ambient statistical sound levels have been measured and reported to characterize the typical range of sound levels that exist in the project area.

Because sound levels are measured in decibels, adding sound levels is not linear. For example, when there are two equal sources of sound added together, the overall level increases 3 dB (e.g., 60 dB plus 60 dB equals 63 dB). Additionally, research indicates the following general relationships between A-weighted sound level and human perception:

- > A 3-dB increase is a doubling of acoustic energy and is the threshold of perceptibility to the average person.
- > A 10-dB increase is a tenfold increase in acoustic energy but is perceived as a doubling in loudness to the average person.

Outdoor Source	Sound Level	Indoor Source
	110	Rock Band at 5 m
Jet Over Flight at 300 m	105	
	100	
Gas Lawn Mower at 1 m	95	
	90	Food Blender at 1 m
Diesel Truck at 15 m	85	
Noisy Urban Area - Daytime	80	Garbage Disposal at 1 m
	75	Shouting at 1 m
Gas Lawn Mower at 30 m	70	Vacuum Cleaner at 3 m
Suburban Commercial Area	65	Normal Speech at 1 m
	60	
Quiet Urban Area - Daytime	55	Quiet Conversation at 1 m
	50	Dishwasher Next Room
Quiet Urban Area -	45	
	40	Empty Theater or Library
Quiet Suburb - Nighttime	35	
	30	Quiet Bedroom at Night
Quiet Rural Area -	25	Empty Concert Hall
Rustling Leaves	20	
	15	Broadcast and Recording
	10	
	5	
Reference Sound Level	0	Threshold of Hearing

Table 3-26 Typical Indoor and Outdoor Sound Levels

Source: Federal Highway Administration, 1980.

3.8.3 Existing Conditions

This section of the DEIS presents the results of ambient noise monitoring to characterize the existing conditions.

3.8.3.1 Noise Measurement Results

The existing environment includes various sources of noise, including vehicular traffic traveling on West Shore Road, noise associated with the existing pier and storage facility, and noise associated with the existing industrial facility to the north of the Subject Property.

Noise monitoring was conducted at five locations in the study area (see **Figure 3-19**), defined in the Final Scope, near noise-sensitive receptors to characterize existing ambient conditions. The noise monitoring was conducted with an American National Standards Institute (ANSI) Type 1 noise monitor (Larson Davis Model 831 LXT). Short-term nighttime noise measurements (20-min) were conducted on Monday, July 26, 2021, from 10:00 PM to 12:00 AM. This period was selected as it is typically when the quietest nighttime ambient conditions exist and there would be the greatest potential for noise impact from new sources of noise. Short-term daytime noise measurements (20-min) were conducted on

Monday, July 26, 2021, from 10:00 AM to 1:00 PM. This period was selected because it is between the peak traffic morning and afternoon periods and is generally the quietest period of the day when construction noise may have the greatest potential for impact. The sound level meters were located at a height of five feet above ground, and the measurement results are representative of the existing conditions, prior to implementation of the Proposed Project.

The predominant source of ambient sound was traffic on local roadways for all measurement locations. **Table 3-27** summarizes the noise measurement results at each site including the peak-hour equivalent sound level (Leq), the maximum sound level during the peak-hour (Lmax), and three statistical measures. This table shows that Leq sound levels across all sites during the day range from 51.0 to 67.4 dBA, while the nighttime sound levels ranged from 45.8 to 59.8 dBA.

Table 3-27 Existing Noise Measurement Results

Site	Location	Measurement Period	Leq (dBA)	Lmax (dBA)	L10 (dBA)	L50 (dBA)	L90 (dBA)
N/1	Aaradrama	Daytime ¹	52.3	71.0	51.7	48.0	45.4
	Aerourome	Nighttime ²	45.8	49.9	47.0	45.5	44.6
MO	NUL Booch Dork	Daytime ¹	51.0	61.6	52.7	49.4	47.2
IVIZ	INFI DEACTI PAIK	arк Nighttime ² 47.7 59.7		50.2	46.5	43.4	
N40	On Site	Daytime ¹	67.4	80.5	70.9	64.9	54.4
IVI3	Un-site	Nighttime ²	httime ² 59.8 81.5		63.0	51.4	46.4
N 4 4	Deesen Lill	Daytime ¹	59.6	76.6	62.5	57.4	51.8
1014	Beacon Hill	Nighttime ²	49.0	65.5	52.1	42.2	39.8
МГ	Tannan Daash	Daytime ¹	55.2	71.2	57.1	53.4	48.3
IVI 5	rappen Beach	Nighttime ²	47.3	65.9	50.0	42.9	41.2

Source: VHB, 2021.

¹ Daytime is the period generally occurring between 7 AM and 10 PM.

² Nighttime is the overnight period generally occurring between 10 PM and 7 AM.



Figure 3-19 Noise Monitoring Locations

Source: ESRI World Imagery

Noise Monitoring Locations

3.8.4 Potential Impacts

The Proposed Action would introduce new sources of noise that may affect existing receptors in the study area. Potential significant adverse noise impacts at existing receptors are assessed by comparing existing and future noise levels per the NYSDEC policy. Existing and future build Leq noise levels have been predicted, including noise associated with the proposed improvements. Stationary source noise is expected to be relatively consistent throughout the day. Thus, stationary source noise is predicted during the midday and nighttime periods, when the mechanical equipment has the greatest potential for noise impact.

Based on the NYSDEC noise impact criteria shown in Table 3-1, a potential significant adverse noise impacts would occur if the proposed action would increase noise levels by 6 dB or more at the receptor locations.

3.8.4.1 Mobile Source Assessment

Based on a review of the Traffic Impact Study performed for the Proposed Project, the Proposed Action is expected to result in minimal increases in traffic, as compared to the existing condition. The Proposed Project is expected to generate residential and visitor trips (e.g., mail and package delivery, trips by maintenance vehicles). As such, as outlined in **Section 3.5**, the Proposed Action will not result in a substantial increase in traffic or mobile source noise. Therefore, the Proposed Project would not result in significant adverse noise impacts associated with mobile sources.

3.8.4.2 Stationary Source Assessment

The Proposed Action would replace the existing industrial facility with the construction of a seven story, 176-unit residential building, consisting of five residential stories above two parking levels with 300 parking spaces (including one parking level that is partially underground). The existing noise level measured at the Subject Property is over 65 dBA.

The Proposed Project is expected to result in a reduction of noise levels at the Subject Property as compared to existing conditions. The Proposed Project would introduce new non-industrial uses with new standard stationary sources, such as HVAC systems that would be compliant with the Town's noise regulations, which is expected not to exceed the 65 dBA criteria for non-industrial use. Therefore, the Proposed Action will not result in a substantial increase in stationary source noise. Thus, there would be no significant adverse noise impact from stationary sources.

3.8.4.3 Construction Noise Impact Assessment

Construction Noise

Construction of the Proposed Project would introduce new sources of construction noise on the Subject Property that have the potential to impact existing adjacent receptors on a temporary basis. The closest receptors that may be affected by construction-period noise include residences at Beacon Hill Colony along West Shore Dr Road and outdoor recreation space at North Hempstead Beach Park, Tappen Beach, and the Aerodrome.

Construction Noise Impact Criteria

All construction activities are required to comply with the Town's noise ordinance as mentioned above.

According to the NYSDEC noise policy, described above, the goal for any permitted operation is to minimize increases in sound levels. As described in **Section 3.8.1**, it is recommended that construction noise levels not exceed 65 dBA. Given the temporary nature of construction noise, increases in ambient noise of 10 dBA or more, which would increase levels above 65 dBA, are considered reasonable impact criteria that would warrant construction noise mitigation. If noise levels exceed 65 dBA, BMPs to reduce construction noise should be implemented.

Construction Noise Impact Assessment

The potential for noise impact due to construction activities will depend upon the phase of construction, the type, amount, and location of construction equipment, and the amount of time the equipment operates over a workday. Construction of the Proposed Project will include site excavation, foundation, steel and concrete erection, and mechanical and interior fit out phases. Truck routes would be established to avoid secondary roadways and residential areas.

Table 3-28 presents the typical (i.e., not necessarily proposed) construction equipment that is used during the construction phase. This table presents the maximum sound level at 50 feet from each piece of equipment, and the utilization factor (which is a measure of how often the equipment is operating throughout the day). The equipment reference noise levels are based on the Federal Highway Administration (FHWA)'s Roadway Construction Noise Model database. Noise levels are predicted assuming a 6 dBA reduction of noise level per doubling the distance for hardground, such as impervious surface or water surface, and 7.5 dBA of noise level reduction per doubling the distance for softground, i.e., grassland. The equivalent sound level (Leq) at 50 feet, which includes contributions from all construction equipment, would be 90 dBA at 50 feet.

Equipment	Number of Units	Lmax at 50 feet (dBA)	Utilization Factor	Leq at 50 feet (dBA)
Pile Driver	1	90	20%	83
Boom Lift	4	85	20%	84
Crane	2	85	16%	80
Front End Loaders	2	80	40%	79
Track Hoe (35 ton)	1	85	40%	81
Bulldozer	1	85	20%	78
Dump Trucks	2	84	40%	83
			Leq at 50 feet	90 dBA

Table 3-28 Construction Noise Predictions at 50 feet

Source: VHB, 2021.

Table 3-29 presents the estimated overall noise levels at all four sensitive receptors listed above. Construction noise levels would reach up to approximately 58.3 dBA. Combined with background noise levels, the overall noise levels would reach up to 60.0 dBA, which does not exceed the NYSDEC criteria of 65 dBA during the daytime hours. Therefore, there would be no significant adverse noise impact from the construction activities.

Receptor Locations	Distance from Site (feet)	Construction Noise Leq (dBA)	Existing Daytime Noise Leq (dBA)	Estimated Overall Noise Leq (dBA)
Aerodrome	1,700	51.8	52.3	55.1
NH Beach Park	1,750	59.2	51.0	59.8
Beacon Hill	2,100	49.5	59.6	60.0
Tappen Beach	2,850	55.0	55.2	58.1

Table 3-29 Construction Noise Predictions at the Receptors

Source: VHB, 2021.

3.8.5 Proposed Mitigation

As presented in **Table 3-29**, the noise levels at sensitive receptors identified near the Subject Property would not exceed the NYSDEC criteria and would operate in accordance with Chapter 38 of the Town Code. Therefore, no noise mitigation would be warranted. However, implementation of BMPs to reduce noise from construction is recommended. BMPs for reducing construction noise may include one or more of the following:

- > Replacing back-up alarms with strobes, as allowed within OSHA regulations, to eliminate the annoying impulsive sound.
- Assuring that equipment is functioning properly and is equipped with mufflers and other noise-reducing features.
- > Locating especially noisy equipment as far from sensitive receptors as possible.
- > Using quieter construction equipment and methods, as feasible, such as smaller backhoes and excavators which would operate near the northern property line.
- > Maintaining equipment to avoid louder operation associated with mechanical issues.
- Using path noise control measures such as portable enclosures for small equipment (i.e., jackhammers and saws).
- > Erecting portable noise walls around construction areas to reduce noise.
- Limiting the periods of time when construction may occur is a common approach to minimizing impact. Adhering to time-of-day restrictions in the Town of North Hempstead would minimize impact to existing residences.
- > Maintaining strong communication and public outreach with adjacent neighbors is a critical step in minimizing impact. Providing abutters information about the time and nature of construction activities can often minimize the effects of construction noise.

3.9 Air Quality

3.9.1 Regulatory Framework

The USEPA promulgated the National Ambient Air Quality Standards (NAAQS)⁹³ following the requirements of the Clean Air Act (CAA) and its Amendments to protect public health and the environment. The NAAQS are set for the six primary pollutants, called "criteria" pollutants: ozone (O₃); carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); particulate matter less than 10 microns in diameter (PM₁₀) and less than 2.5 microns in diameter (PM_{2.5}); and lead (Pb). New York State adopted similar standards for these criteria pollutants.

The current NAAQS and the form in which they are compared to the monitored levels to determine conformity with the standards for each pollutant is presented in **Table 3-30**.

⁹³ United States Environmental Protection Agency NAAQS: <u>https://www.epa.gov/criteria-air-pollutants/naaqs-table</u>

Pollutant		Primary/ Secondary	Averaging Time	Level	Form	
Carbon Monoxide (CO)			8 hours	9 ppm	Not to be exceeded more than once per	
		primary	1 hour	35 ppm	year	
Lead (Pb)		primary and secondary	Rolling 3-month average	0.15 μg/m ^{3 (1)}	Not to be exceeded	
Nitrogen Dioxide (NO ₂)		primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
		primary and secondary	1 year	53 ppb ⁽²⁾	Annual Mean	
Ozone (O ₃)		primary and secondary	8 hours	0.070 ppm ⁽³⁾	Annual fourth-highest daily maximum 8 hour concentration, averaged over 3 yea	
Particle Pollution (PM)	PM _{2.5}	primary	1 year	12.0 μg/m³	annual mean, averaged over 3 years	
		secondary	1 year	15.0 μg/m ³	annual mean, averaged over 3 years	
		primary and secondary	24 hours	35 μg/m³	98th percentile, averaged over 3 years	
	PM ₁₀	primary and secondary	24 hours	150 μg/m³	Not to be exceeded more than once per year on average over 3 years	
Sulfur Dioxide (SO ₂)		primary	1 hour	75 ppb ⁽⁴⁾	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
		secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year	

Table 3-30 National Ambient Air Quality Standards

¹ In areas designated nonattainment for the Pb standards prior to the promulgation of the current (2008) standards, and for which implementation plans to attain or maintain the current (2008) standards have not been submitted and approved, the previous standards (1.5 microgram per cubic meter (µg/m3) as a calendar quarter average) also remain in effect.

² The level of the annual NO2 standard is 0.053 parts per million (ppm). It is shown here in terms of parts per billion (ppb) for the purposes of clearer comparison to the 1-hour standard level.

³ Final rule signed October 1, 2015, and effective December 28, 2015. The previous (2008) O3 standards are not revoked and remain in effect for designated areas. Additionally, some areas may have certain continuing implementation obligations under the prior revoked 1-hour (1979) and 8-hour (1997) O3 standards.

⁴ The previous SO2 standards (0.14 ppm 24-hour and 0.03 ppm annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2)any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO2 standards or is not meeting the requirements of a SIP call under the previous SO2 standards (40 CFR 50.4(3)). A SIP call is an EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

In accordance with the CAA Amendments, counties in each state were designated as attainment and non-attainment areas based on conformity with the NAAQS. Attainment areas are regions where ambient concentrations of a pollutant are below the respective NAAQS; non-attainment areas are those where concentrations exceed the NAAQS.

Maintenance areas are former non-attainment that were redesignated to attainment but needed to prove the status to the EPA for 20 years after redesignation. A single area can be in attainment of the standards for some pollutants while being in non-attainment for others.

The Proposed Project is located in Nassau County, which is designated as a moderate nonattainment area for the 2015 8-hour ozone standard and a serious non-attainment area for the 2008 ozone standard as part of the larger New York-Northern New Jersey-Long Island, NY-NJ-CT metropolitan area. The County has been designated a maintenance area for CO as of May 20, 2002, and PM_{2.5} (for the 2006 standard) as of April 18, 2014 also as a part of the large metropolitan area. Nassau County is in attainment for all remaining criteria pollutants (PM₁₀, Pb, NO₂, and SO₂)

The Proposed Project is expected to affect mobile source emissions during construction and operations and stationary source HVAC and construction emissions. As a result, carbon monoxide, particulate matter (PM_{2.5} and PM₁₀), and NO₂ would be pollutants of concern. Impacts on these pollutants on the Proposed Project and surrounding sensitive land uses will be evaluated.

3.9.2 Existing Conditions

NYSDEC maintains an air quality monitoring system that measures and records concentrations of various air pollutants within the State. These monitoring data are then validated and reported to the EPA. The EPA monitoring data site was used to assess the existing air quality levels in the area. Existing concentrations presented in **Table 3-31** are in the form of the respective ambient standard as presented in **Table 3-310**. These concentrations were observed at the monitors representative of the Subject Property.

Nassau County is located in NYSDEC Region 1. Data from the Nassau County monitor in Eisenhower Park and from the Suffolk County monitor in East Farmingdale, both being the closest NYSDEC Region 1 monitors to the Proposed Project, were used to characterize the existing condition at the site. However, these monitors did not observe all criteria pollutants. Other monitors in Queens (NYSDEC Region 2), located at Queens College, were used to supplement the Long Island monitoring data. Lead is monitored at three locations in New York State, the closest to the site, in the Bronx, was chosen to represent concentrations of this pollutant. However, the 2021 data for this location is not yet available, therefore, 2018-2020 observations for lead were used to characterize local conditions.

Table 3-31 represents the existing concentrations monitored at the monitoring stations closest to the Subject Property in 2019-2021, the most recent full three calendar years of observations. These concentration levels were below all respective pollutant standards. Even ozone levels were below the 8-hour ozone standard, despite the fact that Nassau County is part of a larger New York-Northern New Jersey-Long Island, NY-NJ-CT ozone non-attainment area. With the exception of ozone, concentrations presented in **Table 3-31** are only a small percentage of the health-based national ambient standards (see right-hand column). This is an indication of a good air quality conditions in the area.

Pollutant	Location	Averaging Time	Highest Pollutant Concentration	NAAQS	Existing Concentration vs NAAQS (%)
Carbon Monoxide (CO)	Queens College 2	8-Hour	1.6 ppm	9 ppm	18%
	Queens College 2	1-Hour	2.1 ppm	35 ppm	6%
Nitrogen Dioxide (NO ₂)	Queens College 2	Annual	13.2 ppb	53 ppb	25%
	Queens College 2	1-Hour	51.7 ppb	100 ppb	52%
Ozone (O ₃)	East Farmingdale	8-Hour	0.056 ppm	0.07 ppm	80%
Lead	IS 52 Bronx	3 Month	0.0033 µg/m³	0.15 µg/m³	2%
Particulate Matter (PM ₁₀)	Queens College 2	24-Hour	38 µg/m³	150 μg/m³	25%
Particulate Matter (PM _{2.5})	East Farmingdale	Annual	6.0 μg/m³	12.0 µg/m³	50%
	East Farmingdale	24-Hour	17.3 μg/m³	35 µg/m³	50%
Sulfur Dioxide (SO ₂)	Eisenhower Park	1-Hour	13.7 ppb	75 ppb	18%

Table 3-31 Highest Monitored Concentrations in 2020

Sources: EPA, Outdoor Air Quality Data, Monitor Values Report: <u>https://www.epa.gov/outdoor-air-quality-data/monitor-values-report</u>, NYSDEC, 2020 New York State Ambient Air Quality Report: <u>https://www.dec.ny.gov/docs/air_pdf/2020airqualreport.pdf</u> Notes:

ppm = parts per million

ppb = parts per billion

 $\mu g/m^3 =$ micrograms per cubic meter

3.9.3 Potential Impacts

3.9.3.1 Operational Impacts

The proposed residential building will use natural gas for its HVAC and hot water systems. Pollutants of concern from natural gas combustion are particulate matter, mostly PM_{2.5}, and nitrogen dioxide, NO₂. Existing concentrations of these pollutants in the project area are low, about half of the respective standard level, and even lower for the annual NO₂. This leaves a big window for any impact to reach the level of standard that achieves concentrations that could potentially affect public health and makes such a significant adverse impact from the Proposed Project highly unlikely.

The building is proposed to have five residential floors over two floors of parking. The exhaust stacks of natural gas boiler(s) and heater(s) for this building will be located on the roof, at least 60 feet above grade. The largest impacts from emissions of these stacks would be expected at the same height. The impact would be greater at the close distance to the exhaust stack. There are no structures of similar height in the vicinity of the Proposed Building. Impact of the HVAC and hot water boiler emissions on the adjacent North

Hempstead Beach Park is expected to be small and insignificant due to the height difference and the distance from the expected locations of the rooftop stacks to the Beach Park. Given that existing background concentrations of pollutants of concern are low, concentrations under the future condition with the Proposed Project are expected to be well below the respective standards for affected pollutants.

In addition to HVAC related emissions, the other source of on-site emissions is related to idling and moving vehicles in the parking garage and at the parking lot. There are 300 parking spaces planned for the Proposed Project, 58 of them at the outside parking lot and the rest inside the Proposed Building, one level at grade and one partially below grade. Emissions from the parking lot will not be significant because the lot is small. Emissions from parking inside the Proposed Building will be naturally ventilated through the louvers on the side of the building. These emissions will also be relatively low and exhausted via a large area spread over the façade of the building which will further reduce the potential impact of these emissions. As such, no significant air quality effects of parking emissions are expected.

As detailed in the Traffic Impact Study (TIS), which is summarized in Section 3.6 of this DEIS, the Proposed Project will generate vehicle trips. Emissions from vehicles moving to and from the site could also potentially impact the air quality at the intersections affected by the generated trips. The proposed residential development would generate no more than 77 trips per peak hour. These trips will be distributed amongst the affected intersections but will not change the levels of services (LOS) to worse than C except at two intersections during PM peak hour. According to the NYSDOT Environmental Manual and the USEPA, intersections with LOS C or better should not have any significant air quality impacts. The extra trips will not affect one intersection, Old Northern Boulevard and Main Street, that would stay at the same LOS D during PM peak, i.e., there is no change and no air quality affects associated with the proposed development. The second intersection, Port Washington Boulevard and Beacon Hill Road, would change from LOS C to D. However, this change would be triggered by a small (less than two seconds) increase in delay due to 17 generated trips associated with the proposed residential development. It is unlikely that such a small incremental increase in the volume of vehicles would generate enough emissions to significantly affect the air quality levels on this intersection.

As a result, no significant adverse air quality impacts from the operations of the proposed residential development are anticipated.

3.9.3.2 Construction Impacts

Construction impacts on the air quality have the potential to be significant, but they are temporary in nature. Construction activities, including using the large diesel-powered machinery, dust-generating operations such as earth-moving, loading and unloading, travelling on unpaved surfaces, extended idling of concrete trucks, etc. could generate high emissions at the construction site. Construction truck deliveries, debris removal and labor force vehicles could potentially create congestion and air quality impacts at the local intersections off-site.

The determination of whether it is sufficient to conduct a qualitative analysis of construction emissions or whether a quantitative analysis is required should take into account factors such as duration of construction activities, location of the project site in relation to existing residential uses or other sensitive receptors, the intensity of the construction activity, and the extent to which the project incorporates commitments to appropriate emission control measures. Construction of the seven-story, approximately 263,000 sf residential building and making improvements to the Subject Property would not be of long duration. Construction of the Proposed Project is expected to occur over a 30-month period, as noted in **Section 2.1** of the DEIS, with. USEPA considers that a construction project that lasts less than five years to be short term and to have no potential for significant adverse air quality impacts unless there are sensitive receptors right next to it. There are no residential or other buildings in the close vicinity of the Proposed Project; however, the North Hempstead Beach Park and other sensitive land uses are within 100-200 feet from the Proposed Building location; this 100- to 200-foot distance will allow for adequate dispersion of construction emissions in order not to have significant air quality impacts. With the construction mitigation measures implemented, as noted below, it is unlikely that sensitive areas would experience significant adverse air quality impacts from construction.

3.9.4 Proposed Mitigation

Project operations will not have a potential for significant adverse air quality impacts as described above in the Operational Impacts section. However, to further reduce air quality impact, the Proposed Project will incorporate certain features, as noted here, and described in **Section 3.12.4**:

- > The installation and utilization of high-efficiency appliances (i.e., furnaces, water heaters, stoves/ovens).
- > The installation of a 40 kW per day solar array to power common areas and parking areas to reduce the burning of fossil fuels.
- > The installation of highly reflective white Thermoplastic Polyolefin (TPO) roofing to minimize heat absorption and reduce cooling needs, which will reduce the air conditioning rate.
- > The installation of insulation between parking and residential areas to reduce heat loss and save on HVAC use.
- > The use of a shuttle to the train station that would reduce annual VMT from local trips, thus reducing the burning of fossil fuel from vehicles with internal combustion engines.

These measures would reduce the use of natural gas and other fossil fuels, and therefore minimize emissions from its combustion which would further decrease the air quality impacts. The greening of the Subject Property from its existing condition will also contribute to reduction of particulate matter pollution and improve air quality at the Subject Property.

A number of mitigation measures noted below are usually applied during construction to reduce nuisance dust and other pollutant emissions. Some of these measures are federally or State regulated.

- Dust Control. New York State Standards and Specifications for Erosion and Sediment Control for construction areas require stabilization of non-driving areas and sprinkling, covering, or/and installing barriers along driving areas during construction in order to prevent dust from becoming airborne. See Section 3.1.3 of this DEIS for additional details regarding fugitive dust control.
- > Clean Fuel. Ultra-low sulfur diesel (ULSD) would be used exclusively for diesel engines related to construction activities for the Proposed Project. This is a federal requirement

since 2010 that enables the use of tailpipe reduction technologies that reduce diesel particulate matter and SO2 emissions.

- > Diesel Equipment Reduction. Hoists and small equipment, such as lifts, compressors, welders, and pumps are likely to use electric engines that operate on grid power instead of diesel power engines to the extent practical. This is a common practice that has been achieving wider use as technology improves.
- Restrictions on Vehicle Idling. 6 NYCRR 217-3 enforced by NYSDEC prohibits diesel and non-diesel vehicles of class two or heavier from idling for more than five minutes at a time. On-site vehicle idle time would be restricted for all equipment and vehicles that are not using their engines to operate a loading, unloading, or processing device (e.g., concrete mixing trucks) or otherwise required for the proper operation of the engine.
- Given the construction timeframe, equipment meeting Tier 4 standards for diesel engines (model years 2011/12 and beyond) would be expected to be in wide use and comprise the majority of contractors' fleet. If contractors choose to use older diesel equipment, it is expected that the use of diesel particulate filters (DPF) in Tier 3 emission standard for diesel engines (model years 2006-2011 for engine sizes between 100 and 600 hp)⁹⁴ will be prevalent. Tier 3 with DPF achieves the same particulate matter emission reductions as a newer Tier 4 emission standard for diesel engines. The combination of Tier 4 and Tier 3 engines with DPF would achieve diesel particulate matter reductions of approximately 90 percent when compared to older uncontrolled engines.
- > In order to control construction-related traffic, construction daily hours may be adjusted to prevent coincidence with the peak traffic hours and avoid congestion.

Implementation of these measures is expected to greatly reduce potential air quality impacts of construction on surrounding sensitive land uses, as described above

3.9.5 Conclusions

Operations of the Proposed Project would potentially contribute HVAC and hot water emissions, parking emissions and emissions from project-generated trips to the air quality levels at and around the project site. Evaluation of potential impacts from these three sources revealed that no significant adverse air quality impacts from them are expected. Additional mitigation measures that the Proposed Project is prepared to implement, as noted in **Section 3.9.5**, will make operational air quality impacts even smaller.

Construction of the Proposed Project is expected to occur during a 30-month period and have minimal potential to impact the nearby North Hempstead Beach Park and other sensitive land uses that are located within 100 to 200 feet from the project site. Additionally, construction impacts would be greatly reduced by the mitigation measures that are prescribed by federal and State regulations and requirements and other measures that are customary for construction projects.

As such, no significant adverse air quality impacts from the operation or construction of the Proposed Project are anticipated.

⁹⁴ See Table 2-1 of the USEPA's Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES2014b document

3.10 Light Deprivation and Shadows

3.10.1 Regulatory Framework

The Town's adopted Final Scope serves as the regulatory framework for this section. Specifically, the Final Scope identifies the need to perform a preliminary screening assessment to ascertain whether the Proposed Action may potentially cause significant impacts on identified sunlight-sensitive resources in the surrounding areas. The shadow analysis depicts shadows for the solstice (June 21 and December 21) and equinox (March 20 and September 21) at certain time periods.

3.10.2 Existing Conditions

3.10.2.1 Sunlight-Sensitive Resources

Sunlight-sensitive resources are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. Generally, the following are considered to be sunlight-sensitive resources:

- Public open space (e.g., parks, beaches, playgrounds, plazas, schoolyards, greenways, and landscaped medians with seating). Planted areas within unused portions of roadbeds are also considered sunlight-sensitive receptors. The uses and vegetation in an open space establish its sensitivity to shadows. This sensitivity is assessed for both (1) warm-weather-dependent features like wading pools and sand boxes, or vegetation that could be affected by loss of sunlight during the growing season (i.e., March through October); and (2) features, such as benches, that could be affected by a loss of winter sunlight. Uses that rely on sunlight include passive use, such as sitting or sunning; active use, such as playfields or paved courts; and such activities as gardening, or children's wading pools and sprinklers. Where lawns are actively used, the turf requires extensive sunlight. Vegetation requiring direct sunlight includes the tree canopy, flowering plants, and plots in community gardens. Generally, four to six hours a day of sunlight, particularly in the growing season, is a minimum requirement, for these features.
- Features of historic architectural resources that depend on sunlight for their enjoyment by the public. Only the sunlight-sensitive features are considered, as opposed to the entire architectural resource. Sunlight-sensitive features of historic architectural resources include the following: design elements that are part of a recognized architectural style that depends on the contrast between light and dark (e.g., deep recesses or voids such as open galleries, arcades, recessed balconies, deep window reveals, and prominent rustication); elaborate, highly carved ornamentation; stainedglass windows; exterior building materials and color that depend on direct sunlight for visual character; historic landscapes, such as scenic landmarks including vegetation recognized as an historic feature of the landscape; and structural features for which the effect of direct sunlight is described as playing a significant role in the structure's importance as an historic landmark.
- Natural resources, where the introduction of shadows could alter the resource's condition or microclimate. Such resources could include surface water bodies, wetlands, or designated resources such as coastal fish and wildlife habitats.

As previously mentioned, the Subject Property contains one concrete one-story building and one masonry storage building, as well as large piles of sand and gravel with associated machinery. As such, shadows on-site are minimal and remain only on the Subject Property.

3.10.3 Potential Impacts

In order to understand the potential light deprivation and/or shadow impact of the proposed multi-story, multi-family residential building on identified sunlight-sensitive resources, a shadow analysis was conducted by the Applicant. The shadow analysis was completed in Lumion, a 3D rendering software. A model for rendering the shadows was created for the analysis, where the Subject Property is geographically located via latitude and longitude, with north rotated in the proper direction according to the location of the sun and proposed shadow. The location of the sun in the model is set by time zone based on Greenwich Mean Time (GMT). Sliders in the model allow for changes in month, date, and time (hereinafter the "Shadow Study").

The rendering program for the Shadow Study requires the location of the site (longitude and latitude), the dates of the year (month and day), and the times of day to be analyzed, as well as the dimensions of the Proposed Building. The height of the proposed building included in the Shadow Study was 69.75 feet. The program then generates the location of the sun and the shadows the proposed building is expected to cast on the dates and times provided. The program then analyzes several conditions—March 20 at 9:00 a.m., 12:00 p.m., and 3:00 p.m., and June 21, September 21, and December 21 at the same times for the proposed conditions. June 21 is the date of the summer solstice (the longest day of the year) in which the sun is directly overhead in the northern hemisphere and shadow lengths are shorter than any other day of the year. December 21 marks the winter solstice (the shortest day of the year) when the location of the sun is farthest south due to the earth's equatorial tilt with respect to the sun. Since the sun is so low on the horizon, shadows cast on December 21 are longer than on any other day of the year.

A review of the Shadow Study generated for March 20 illustrates that the proposed building would cast minimal shadows over the boundary of the Subject Property and adjacent property to the north at the 9:00 a.m. hour. Shadows would rotate towards the east and a minimal shadow would be cast over the shoreline and a minimal portion of the proposed marina along the Subject Property boundary at the 12:00 p.m. hour. Shadows are anticipated to extend farther onto the water and proposed marina at the 3:00 p.m. hour. Although, shadows do extend onto the property directly adjacent to the north during the 9:00 a.m. hour, it is expected that these shadows would be casted on the adjacent property for a minimal amount of time, refer to **Figure 3-20**, below. The red outlines on each rendering show the extent of the anticipated shadow of the Proposed Building.

Similarly, shadows generated under the Shadow Study during June 21 would be projected such that shadows would be cast minimally on-site during the 9:00 a.m. and 12:00 p.m. hours. Moreover, shadows are anticipated to extend farther onto the water and proposed marina at the 3:00 p.m. hour, refer to **Figure 3-21**, below. Shadows do not extend onto the properties directly adjacent to the north or south during any of the hours examined within this seasonal period.



Figure 3-20 Shadow Study: March 20 and September 21



Figure 3-20 Shadow Study: March 20 and September 21



Figure 3-21 Shadow Study: June 21









A review of the September 21 models demonstrates that at the 9:00 a.m. hour, slight shadows would be casted over the boundary of the Subject Property and adjacent property to the north. At the 12:00 p.m. hour, shadows would rotate towards the east and a minimal shadow would be casted over the shoreline and a minimal portion of the proposed marina along the property boundary of the Subject Property. At 3:00 p.m. on September 21, shadows would extend farther onto the proposed marina and water to the north, refer to **Figure 3-21**, above. Although, shadows do extend onto the property directly adjacent to the north during the 9:00 a.m. hour, it is expected that these shadows would be cast on the adjacent property for a minimal amount of time between the 9:00 a.m. and 12:00 a.m.

A review of the December 21 models demonstrates that, in general, the sun would cast longer shadows than those occurring on the other analysis days. At 9:00 a.m. on December 21, the shadows from the proposed building would extend to the north, slightly more than those on September 21. At 12:00 p.m., shadows would rotate towards the northeast over the water and proposed public pier, promenade and marina. At 3:00 p.m., shadows would be the longest, casting over the water and the entirety of the proposed public pier and marina, refer to **Figure 3-22**, below. However, these shadows would be of relatively short duration during the 3:00 p.m. hour.
Figure 3-22 Shadow Study: December 21







Figure 3-22 Shadow Study: December 21

Overall, the Proposed Building would minimally cast shadows on the adjacent industrial use to the north (the only off-site area affected),but would affect a portion of the open space (outdoor swimming pool, public pier and promenade and the marina) created as part of the Proposed Action. However, the most significant shadows would occur in December when fewer people would be outside for an extended period of time and when outdoor activities would be minimal.

3.10.3.2 Sunlight-Sensitive Resources

As identified above, sunlight-sensitive resources are those resources that depend on sunlight or for which direct sunlight is necessary to maintain the resource's usability or architectural integrity. As set forth in the Final Scope, the following resources were identified as sunlightsensitive: Beacon Hill Bungalow Colony; North Hempstead Beach Park; and Tappen Beach (on the east side of Hempstead Harbor). The results of the foregoing Shadow Study show that the Proposed Action is not expected to cast shadows on any of these resources.

With respect to natural resources, as indicated above, sunlight-sensitive natural resources include surface waters, wetlands, and Significant Coastal Fish and Wildlife Habitat (SCFWHs), all of which occur within Hempstead Harbor, including at the Subject Property. As detailed in **Section 3.4.2**, Hempstead Harbor is an approximately 1,500-acre estuarine embayment that is connected to the Long Island Sound. The harbor is divided into two distinct sections by North Hempstead Beach Park, which is a spit of land located to the south of the Subject Property that extends eastward from the western shore of the harbor towards the eastern shore. The outer portion of Hempstead Harbor to the north of North Hempstead Beach Park is composed of waters that range between six and 20 feet deep at mean low water, while the

more protected inner harbor to the south of North Hempstead Beach Park is characterized by comparatively shallow conditions, with depths of six feet or less at mean low water. Due to documented finfish, shellfish, avian and other wildlife populations that occur within Hempstead Harbor, the harbor has been designated as a Significant Coastal Fish and Wildlife Habitat (SCFWH) by the NYSDOS. Additionally, NOAA has designated Hempstead Harbor as Essential Fish Habitat for 14 finfish species.

As also detailed in **Section 3.4.2**, the Subject Property is located within the outer harbor area of Hempstead Harbor, where water depths are significantly deeper, as compared to the inner harbor area. The majority of the Subject Property wetland area is composed of subtidal wetlands, which are permanently inundated by water, while the remaining nearshore portion occurs within the intertidal zone that is alternately inundated and exposed during tidal cycles. The intertidal zone at the Subject Property does not support vegetated wetland habitats, and the majority of the intertidal zone and portions of the subtidal zone have been developed and disturbed through the installation of hardened shoreline structures, as well as the dilapidated remains of piers, a steel dry dock, sunken vessels, and other in-water structures and debris. With respect to submerged aquatic vegetation within the subtidal zone, according to the Final Report of the NYS Seagrass Task Force, eel grass does not occur at or adjacent to the Subject Property.

The Shadow Study indicates that Hempstead Harbor would receive incremental shadows (i.e., shadows that do not occur under existing conditions but would occur as a result of the Proposed Action) during portions of all three analysis periods (March 20/September 21, June 21, and December 21). Shadows can have potential impacts on finfish by impeding foraging or other essential life activities by affecting behaviors that rely on light cues. Although portions of Hempstead Harbor would receive incremental shading on the March 20/September 21 and June 21 analysis days, new shadows would be limited in areal extent and confined primarily to the nearshore, intertidal zone of the Subject Property, which is exposed twice daily during low tide stages and, therefore, does not support surface water, and finfish, during these times. Significantly, the greatest temporal and areal extent of incremental shading would occur on the December 21 analysis day, when most migratory and resident finfish known to inhabit Hempstead Harbor are either not present within local waters or are not engaged in breeding or early essential life stages (i.e., eggs, larval or juvenile stages). As demonstrated by the incremental shading on the spring and summer analysis days, the temporal and areal extent of incremental shading would be less during the period when these essential behaviors and life stages occur for most migratory and resident finfish species. Moreover, taking into account the disturbed existing conditions described above, the limited nearshore area that would experience the majority of incremental shading does not represent optimal habitat for most resident finfish species. Based on the foregoing, although some finfish species might experience limited and temporary effects, no significant adverse impacts to finfish are anticipated due to incremental shading.

The adult life stages of most resident shellfish within Hempstead Harbor occur on or within the harbor bottom or other submerged substrates within the subtidal zone that comprises the majority of the of the Subject Property wetlands. As such, due to the existing bottom depths, as well as the limited areal extent of incremental shading that would occur within this zone, significant adverse impacts to shellfish populations are not anticipated. Similarly, as the subtidal waters that occur at the Subject Property are not known to support eel grass or significant occurrences of other submerged aquatic vegetation, no impacts to same are anticipated. Moreover, adverse impacts to vegetated tidal wetlands from incremental shading would not occur, since these habitats do not occur at the Subject Property.

With respect to primary productivity (the rate at which solar energy and simple chemicals are converted to organic biomass through photosynthesis or chemosynthesis), the tidal currents within Hempstead Harbor currently move macroalgae ("seaweed") and microalgae (microscopic algae, including phytoplankton) and other natural elements through the incrementally shaded area and would continue to do so following implementation of the Proposed Action. Based on the limited temporal and areal extent of incremental shading, particularly during the seasons when biological activity and primary productivity are at peak levels, significant adverse impacts to macroalgae and microalgae populations within Hempstead Harbor are not anticipated due to incremental shading.

Based on the foregoing, no significant adverse impacts to Hempstead Harbor are anticipated due to incremental shadows from the Proposed Action, and no further analysis is necessary.

3.10.4 Proposed Mitigation

No significant adverse light deprivation or shadows impacts have been identified, based on the foregoing analyses. Therefore, no mitigation measures are proposed.

3.11 Coastal Resiliency

3.11.1 Regulatory Framework

New York State, Nassau County, and the Town of North Hempstead have set forth various regulations, plans and policies governing coastal development and resiliency planning. The following is a summary of such plans and policies.

3.11.1.1 New York State Department of State Coastal Management Program

The federal Coastal Zone Management Act was passed in 1972 to encourage coastal states to develop and implement Coastal Management Programs (CMPs). The act was established as a United States national policy to preserve, protect, develop, and where possible, restore or enhance the resources of the Nation's coastal zone for current and succeeding generations. In New York State, the CMP is administered by the New York State Department of State (NYSDOS) under the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. NYSDOS has established 44 coastal policies⁹⁵ that promote the beneficial use of coastal resources, prevent their impairment, or otherwise address activities that may affect resources within the New York State Coastal Zone. A consistency review with the 44 policies is required for projects that are subject to federal funding, permits, and/or authorizations.

3.11.1.2 New York State Community Risk and Resiliency Act

As described in **Section 3.3.1**, New York State's CRRA was enacted to ensure that certain state monies, facility-siting regulations and permits include consideration of the effects of

⁹⁵ New York State Department of State. Coastal Management Program. *State Coastal Policies*. Available at: https://dos.ny.gov/system/files/documents/2020/02/coastalpolicies.pdf. Accessed August 2021.

climate risk and extreme-weather events.⁹⁶ This legislation provided tools that serve as key guidance for state agencies and coastal communities to address their exposure and risk to sea level rise and climate change. In consideration of the existing conditions and projected conditions for various state permit programs, facility-siting regulations, and funding programs, these tools help assess the potential impacts of sea level rise and climate change.

3.11.1.3 Nassau County Hazard Mitigation Plan

The Nassau County Hazard Mitigation Plan (the "Hazard Mitigation Plan") (January 2021)⁹⁷ was created with the intention of identifying and reducing the risks associated with natural hazards to increase the resilience of the community. As part of this effort, the County identified hazards of concern, profiled these hazards, estimated risk and potential losses associated with these hazards, developed mitigation goals and actions that address the hazards that impact the area, and developed a strategy for plan implementation.

As part of the *Hazard Mitigation Plan*, a risk assessment was conducted to evaluate the risks of natural hazards that are anticipated to impact the people, economy, services, housing, infrastructure, and environment of the County. The natural hazards included, among others, coastal hazards, hurricanes and tropical storms, and flooding. In addition, the *Hazard Mitigation Plan* identified mitigation priorities that the County and its jurisdictions should address over the next five years.

Participating jurisdictions, including the Town of North Hempstead, also created municipalspecific "Annexes" to the *Hazard Mitigation Plan*. The Annexes identified the natural hazards most impactful to the respective municipality, evaluated the likely impacts of each identified natural hazard, and developed an effective mitigation strategy for the anticipated impacts.

3.11.1.4 Town of North Hempstead—Floodplain Management Regulations

Chapter 21 of the Town Code was set forth to minimize the threat of damages associated with flooding and erosion. To do so, this chapter establishes floodplain development standards designed to protect against flood damage, to the greatest extent feasible. Areas located within a Special Flood Hazard Area (SFHA), as determined by FEMA's FIRM, are subject to the provisions of Chapter 21. As noted in **Section 3.3.3**, the Subject Property is located within a SFHA (i.e., Zone VE) and is therefore subject to the provisions of Chapter 21.

3.11.2 Existing Conditions

The Subject Property is currently improved with a sand and gravel storage facility and contains a number of features located on or immediately adjacent to its shorefront along Hempstead Harbor. A description of the Subject Property's existing coastal conditions, as observed during VHB's July 20, 2021 site visit, follows below. A visual depiction of the Subject Property's existing shorefront features is provided in **Figure 2-1**.

The northern portion of the Subject Property contains a dilapidated concrete platform that is $27,980 \pm$ SF in size. The concrete platform is currently used for storage purposes, containing

⁹⁶ New York State Assembly. Community Risk and Resiliency Act (CRRA) Statute. Available at: https://dos.pv.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_status/ https://dos.pv.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_status/ https://dos.pv.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_status/ https://doc.pv.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_status/ https://doc.pv.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_status/ https://doc.pv.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_status/ https://doc.pv.gov/system/files/documents/ https://documents/ https

https://dos.ny.gov/system/files/documents/2020/06/community-risk-and-resiliency-act_statute.pdf. Accessed August 2021.
 ⁹⁷ Nassau County. Department of Emergency Management. *Nassau Hazard Mitigation Plan*. Available at:

https://www.nassaucountyny.gov/2813/Hazmit-Plan. Accessed August 2021.

construction trucks and vehicles, piles of construction and building materials (i.e., gravel, steel beams), dumpsters, boats, and other debris.

A concrete bulkhead lines the concrete platform on the south side. The eastern and northern sides of the concrete platform have broken down substantially and, in some places, have fallen into the water. Near the northwest portion of the concrete platform are the remains of two sunken barges. The remains of a third sunken barge are found near the southwestern portion of the concrete platform. A functional, intact barge adjoins the southeastern portion of the concrete platform. Debris and other abandoned structures are found in the waters between the sunken and intact barges.

Photo 3-23





From the northeast portion of the concrete platform, facing south towards North Hempstead Beach Park.



From the northeast corner of the concrete platform, facing west.

Photo 3-25



From the northern portion of the concrete platform, facing east towards Hempstead Harbor.

Photo 3-26



From near the northwest portion of the concrete platform, facing northeast.

Further south, near the central portion of the Subject Property, are the remains of two separate wooden piers. The remains consist of numerous rows of wooden pilings, which extend eastward from the shoreline to beyond the Subject Property's easternmost boundary. The remains of the southern wooden pier extend along the shoreline towards the Subject

Property's southernmost boundary. Piles of debris (i.e., broken concrete) are also found in this portion of the Subject Property.

Photo 3-27





From the southwestern portion of the concrete platform, facing south towards North Hempstead Beach Park. A sunken barge is also visible.



From near the central portion of the Subject Property, south of the concrete platform, facing southeast.

Between the remains of the two wooden piers are the remnants of a steel dry dock (i.e., steel cribbing). Rows of horizontal steel I-beams lie atop a concrete boat ramp, which descends gradually into the water. The steel dry dock also contains several rows of vertical steel I-beams, which similarly descend with the concrete boat ramp into the water.

At the time of the site visit, several intact barges of varying sizes were present near the southernmost property boundary, in the waters immediately north of Hempstead Harbor Park. Same contained, among other things, various construction materials (i.e., wooden and steel beams) and a crane. A tugboat was also docked to the southernmost barge at the time of the site visit.

Photo 3-29



From near the existing concrete block building, facing northeast towards Hempstead Harbor.



From near the shoreline of North Hempstead Beach Park, facing northeast.

It is noted that an existing bulkhead runs nearly the entire length of the Subject Property's coastline. The bulkhead is substantially deteriorated, and in certain areas (i.e., along the north and east sides of the existing concrete platform) has fallen into the water.

Photo 3-30

Based upon the presence of the intact barges, coastal activities at the Subject Property generally consist of the transport of materials and/or equipment to/from the site. A review of recent aerial images revealed that several of the intact barges (i.e., that immediately south of the concrete platform and that containing the crane) were moved to the Subject Property between May and October of 2020; the barges do not appear to have moved position between the October 2020 aerial and the July 2021 site visit. As such, coastal activities at the Subject Property are considered to be intermittent.

It is noted that the Subject Property is privately owned and does not currently provide any public access to the waterfront.

3.11.2.2 New York State Department of State Coastal Management Program

The Subject Property is located within the Coastal Area of New York State. In addition, the Proposed Action would be subject to permitting by the United States Army Corp of Engineers (USACE). Accordingly, the Proposed Action requires a consistency analysis with the 44 coastal polices established by the NYSDOS, as detailed in **Section 3.11.3**, below.

3.11.2.3 Nassau County Hazard Mitigation Plan

As previously noted, the *Hazard Mitigation Plan* evaluated the risks of natural hazards that are anticipated to impact the people, economy, services, housing, infrastructure, and environment of the County. The natural hazards included, among others, coastal hazards, hurricanes and tropical storms, and flooding. The *Hazard Mitigation Plan* classified coastal hazards and flooding as "highly likely" hazards; hurricanes and tropical storms were classified as "likely" hazards.

The *Hazard Mitigation Plan* identified mitigation priorities that the County and its jurisdictions should address over the next five years. These mitigation priorities are:

- > Goal 1: Build stronger by promoting mitigation actions that emphasize sustainable construction and design measures to reduce or eliminate the impacts of natural hazards now and in the future.
- > Goal 2: Build and support local capacity to prepare for, respond to, and recover from disasters.
- > Goal 3: Protect existing property including public, historic, private structures, stateowned/operated buildings, and critical facilities and infrastructure.
- Goal 4: Increase awareness of hazard risk and mitigation capabilities among stakeholders, citizens, elected officials, and property owners to enable the successful implementation of mitigation strategies.
- > Goal 5: Develop and implement long-term, cost effective, and resilient mitigation projects to preserve or restore the functions of natural systems.
- > Goal 6: Improve coordination between land use and redevelopment planning to encourage safe, economically sound investments.

Within the Town of North Hempstead Annex (the Town's Annex), the Town identified coastal hazards, hurricanes, and severe winter weather as the hazards that most impact the Town. The Town's Annex noted that coastal hazards and hurricanes have substantial impacts on the following categories: community, economy, health and social services, housing, infrastructure, and natural and cultural resources. Though not listed as one of the most impactful natural hazards, it was noted that flooding also impacts the same categories.

To mitigate the potential impacts of natural hazards, the Town's Annex developed a set of 18 proposed mitigation actions. None of the proposed mitigation measures pertained specifically to the Subject Property itself. However, the Town's Annex did include mitigation actions for North Hempstead Beach Park, which is located immediately south of the Subject Property, and for Port Washington overall, as follows:

- > North Hempstead Beach Park: Flooding occurs within the park during times of heavy rainfall. According to the Town's Annex, the North Hempstead Beach Park project would reduce/stop flooding by removing asphalt and concrete from the water way and boat ramp, restoring the bulkhead, and restoring wetlands that will accept tidal surges.
- > **Port Washington Flooding Project:** The Town's Annex notes that Port Washington's current drainage infrastructure does not adequately prevent flooding. The Town's Annex also notes that the Port Washington Flooding Project aims to rehabilitate drainage infrastructure to alleviate future flooding.

3.11.3 Potential Impacts

Under the Proposed Action, many of the existing structures found along the Subject Property's coastline and within the adjoining waters would be removed, including a portion of the existing concrete platform, the deteriorated bulkhead, the remnants of the former dry dock (i.e., steel cribbing), the remnants of the northern wooden pier, the sunken and intact barges, and other debris found throughout the Subject Property's underwater lands. The remnants of the southern wooden pier would be cut to the mean low water elevation.

Substantial improvements would then be undertaken along the Subject Property's coastline and within the adjoining waters, as is described below and depicted in **Figure 3-23.**

As part of the Proposed Action, $4,940 \pm$ SF of tidal area in and around the former dry dock would be filled to re-align this portion of the Subject Property's coastline. In addition, some tidal areas located north of the existing concrete platform would be filled. In total, 7,665 \pm SF of tidal areas would be filled under the Proposed Action. A new bulkhead would then be installed along the Subject Property's modified coastline.

A proposed timber pier measuring 295± feet by 12± feet (i.e., 3,540± SF) would be installed near the location of the former concrete boat ramp. Three floating docks (i.e., Floating Docks A—C) would be installed on the northern side of the proposed timber pier. Floating Dock A would measure $135\pm$ feet by $6\pm$ feet (i.e., $810\pm$ SF), and would contain four fingers.⁹⁸ Floating Dock B would measure $60\pm$ feet by $6\pm$ feet (i.e., $360\pm$ SF). Floating Dock C would measure $135\pm$ feet by $6\pm$ feet (i.e., $810\pm$ SF) and would contain four fingers. A 72-linear-foot wave screen would be installed off the eastern edge of the proposed timber pier. The proposed wave screens (a second wave screen is described below) would be designed to effectively reduce the energy and impact of incoming waves, thereby protecting the proposed marina, and boats moored therein, from potentially damaging wave action. It is noted that wave screens are typically less physically intrusive than typical breakwater structures (e.g., rubble piles, rock sills, jetties, etc.), as wave screens would thereby protect the proposed marina in a manner that, as compared to traditional hard structures, is anticipated to be less impactful to the natural marine environment.

⁹⁸ Smaller floating docks that demarcate boat slips and provide access to the main portion of the floating dock.

Figure 3-23: Proposed Marina Layout

West Shore Residences

145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



110	END			
DF	EDGE ARE	A (72,185 S	SF)	
м	ERS/DOCK	S AREA (8,3	515 SF)	
FI	LL AREA ()	7,665 SF)		
A.	JU. AREA (JUVER (4,5/	o 5+)	
Ci.	JT AREA (1	4,600 SF)		
		Provide Library		
TE	EVATIONIS			
	MIW	NAVDRS	DESCRIPTION	
-	+8.3	+4.4	SPRING HIGH WATER	
- 3	+7.7	+3.8	MEAN HIGHER HIGH WATER	
	+7.3	+3.4	MEAN HIGH WATER	
			MEAN SEA LEVEL	
3	+3.7	-0.2	MEAN SEA LEVEL	
-	+3.7 ±0.0	-0.2	MEAN SEA LEVEL MEAN LOW WATER	
1	+3.7 ±0.0 -0.3	-0.2 -3.9 -4.2	MEAN SEA LEVEL MEAN LOW WATER MEAN LOWER LOW WATER	



A reduced earth-filled pier would be rehabilitated; the upgraded pier would be triangular in shape, and would be substantially smaller in size (i.e., $13,615\pm$ SF as compared to $14,377\pm$ SF); the proposed new bulkhead would run along all three sides of the proposed pier. The proposed earth-filled pier would provide public spaces (e.g., educational viewing resources) and would accommodate public, family-friendly events.

The proposed smaller pier would expose $14,365 \pm$ SF of tidal area that is currently occupied by the existing concrete platform. The removal of other existing structures would result in the daylighting of a combined total of $14,596 \pm$ SF of tidal areas that are currently covered.

A fourth floating dock (Floating Dock D) measuring $220\pm$ feet by $6\pm$ feet (i.e., $1,320\pm$ SF) and containing a series of seven fingers would be installed along the south side of the proposed pier. A 595±-SF platform would be installed proximate to the proposed pier's eastern edge. Additionally, 272-linear feet of wave screens would be installed on the seaward face (i.e., the side facing Hempstead Harbor) of the proposed platform.

The four proposed floating docks, as well as the proposed timber pier, comprise the proposed marina. In total, the proposed marina would provide 20 to 30 boat slips. As noted throughout this DEIS, the proposed slips would provide private and public mooring locations and would also accommodate local emergency service providers. The proposed marina would have a dredged minimum water depth of four feet during average low-tide; a 72,185±-SF area would be dredged to accommodate the proposed marina, generating 1,195± cubic yards of dredged material.

As described in **Section 3.11.2**, the Subject Property's coastline is substantially developed with numerous hard structures (i.e., the dilapidated bulkhead, the concrete platform, the former dry dock and boat ramp, and the sunken and intact barges). The Proposed Action involves the removal of, and in some instances (i.e., the proposed bulkhead and smaller earth-filled pier) the replacement or rehabilitation of, these existing hard structures. As such, the Proposed Action would not result in a significant increase in the area of development along the Subject Property's coastline. Rather, the Proposed Action would result in a net increase of exposed tidal areas. Specifically, the Proposed Action would fill a total of $7,665\pm$ SF of tidal areas, while $14,596\pm$ SF of currently covered tidal areas would be exposed. As a result, the Proposed Action would expose a net total of $6,931\pm$ SF of tidal areas.

Following the implementation of the Proposed Action, coastal activities at the Subject Property would primarily consist of active (i.e., boating) and passive recreation (e.g., sightseeing, photography, etc.). As noted above, the proposed earth-filled pier would also accommodate educational and public, family-friendly events.

As described in **Section 3.3.3**, the proposed coastal features described above would be designed and constructed in accordance with the general intent of Chapter 21 of the Town Code. With regard to nonresidential structures within coastal high-hazard areas (i.e., Zone VE), Chapter 21 requires that same be elevated to an elevation of at least two feet above the corresponding Base Flood Elevation (BFE). However, it is respectfully submitted that this provision is not necessarily intended for water-dependent uses such as the proposed marina or public pier that do not include any finished floors. None the less, the proposed coastal features would conform with the general intent of this requirement, as same would incorporate design features that would preclude adverse flooding impacts.

Specifically, as detailed in **Section 3.3.3**, the floating docks would be designed to rise and fall with the elevation of the water, such that same would remain atop the water during a flooding event. Other features of the proposed marina as well as the public pier and promenade would be designed to be inundated during flooding, such that same would not be adversely impacted during a flooding event.

It is noted that the Proposed Building has also been designed to conform with the relevant portions of Chapter 21. With regard to residential structures, the lowest horizontal structural member of the lowest elevated floor must be elevated to at least two feet above the corresponding BFE. In accordance with this standard, the lowest horizontal structural member supporting the Proposed Building's lowest elevated floor would be elevated to at least 18 feet amsl. Further, the lowest finished floor would be raised to 19 feet amsl, thereby providing a clearance of three feet above the respective BFE. The Proposed Building would therefore not impede the flow of floodwaters, in accordance with the intent of this provision.

It is further noted that in raising the elevation of the lowest finished floor to 19 feet amsl, the Proposed Building has also been designed to minimize, to the extent feasible, the potential for impacts associated with sea level rise. As detailed in **Section 3.3.3**, the Community Risk and Resiliency Act (CRRA) indicates that sea level could rise by approximately 34 to 47 inches by the year 2100 under "medium" to "high-medium" conditions. Based on long-term NOAA data, mean high water could thereby increase to between $5.48\pm$ feet ($65.8\pm$ inches) and $6.57\pm$ feet ($78.8\pm$ inches) amsl under these conditions. The Proposed Building would therefore be elevated well above projected sea levels for the year 2100. As such, the Proposed Building has been designed to incorporate resiliency measures that minimize, to the extent feasible, potential impacts associated with sea level rise.

3.11.3.2 New York State Department of State Coastal Management Program

As described in **Section 3.11.1**, the NYSDOS has established 44 coastal policies that promote the beneficial use of coastal resources, prevent their impairment, or otherwise address activities that may affect resources within the New York State Coastal Zone. Projects that are located within the Coastal Area of New York State, and are subject to federal funding, permitting, and/or authorization, are required to demonstrate consistency with the NYS Coastal Policies. Since the project would be subject to permitting by the USACE, a detailed assessment of the Proposed Action's consistency with the New York State Coastal Policies follows.

Development Policies

Policy 1: Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

The Subject Property's existing waterfront improvements are dilapidated, visually unappealing, and preclude public access to the waterfront. The Proposed Action would involve the removal of the existing deteriorated improvements (i.e., the remains of a sunken barge, the remains of steel cribbing, an existing deteriorated bulkhead) and the construction of a new marina. The proposed marina would provide four floating docks, which would be protected by two proposed wave screens; the proposed floating docks would be accessed via two proposed piers. The proposed marina would provide both public and private mooring locations and would also provide accommodations for local emergency service providers.

The Proposed Action would redevelop the Subject Property's waterfront with a modern, more visually appealing shoreline and would improve site conditions by providing new resilient structures and amenities. In doing so, the Proposed Action would revitalize the Subject Property's waterfront area with a water dependent use (i.e., the proposed marina, see response to Policy 2, below) that, as compared to the existing condition, better facilitates the public use and enjoyment of this waterfront area.

Overall, the Proposed Action would redevelop a deteriorated and underutilized waterfront area in a manner that is consistent with this policy.

Policy 2: Facilitate the siting of water dependent uses and facilities on or adjacent to coastal waters.

Pursuant to Policy 2, water-dependent uses include, among others:

2. Recreational activities which depend on access to coastal waters (for example: swimming, fishing, boating, wildlife viewing)

Based on the above, the proposed marina and public pier, which is part of the overall Proposed Project, constitutes a water-dependent use. As such, the Proposed Action would involve the siting of a water-dependent use on coastal waters. It is also noted that the proposed residential building constitutes a water-enhanced use, which, pursuant to Policy 2, is a use whose location near the waterfront adds to the use and enjoyment of the water's edge.

Overall, the Proposed Action would involve the siting of a water-dependent use and a waterenhanced use along a coastal water (i.e., Hempstead Harbor) and, thus, is consistent with this policy.

Policy 3: Further develop the State's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the sitting, in these port areas, including those under the jurisdiction of state public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

The Subject Property is not located within one of the State's major ports. As such, this policy is not applicable to the Proposed Action.

Policy 4: Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.

Pursuant to Policy 4, traditional uses that have contributed to the economic strength and attractiveness of smaller harbor communities include, among others, marinas. According to Policy 4, these traditional uses have made smaller harbor areas appealing as tourist destinations and as commercial and residential areas. Based on the above, the proposed marina, promenade, and pier would contribute to the continued economic strength and attractiveness of the Port Washington harbor community, and would further contribute to

the maritime identity of the community. More specifically, the proposed "educational" viewing pier would be designed to pay homage to some of the site's history, speak to local marine and bird life, and provide space for public, family-friendly events. As such, the Proposed Action is consistent with this policy.

Policy 5: Encourage the location of development in areas where public services and facilities essential to such development are adequate.

The Proposed Action is expected to be served by all the utilities required to support the proposed development, including water supply, sanitary sewage treatment and disposal, electricity and natural gas. The Proposed Action includes adequate accommodations for on-site stormwater management. The site is well-served by the adjacent roadway system, and is within the vicinity of public transportation accommodations (i.e. the Port Washington LIRR station). Additionally, the Proposed Action would site a proposed residential building in an area close to shopping and community facilities located along nearby commercial business corridors.

It is also noted that the Proposed Action would provide certain public service and facility benefits, including access to the residents' lounge during shift changes for the Port Washington Police Department, a dedicated boat slip for Town emergency service provider use, and shuttle service to and from the Port Washington LIRR station and downtown.

Overall, the Proposed Action is consistent with this policy.

Policy 6: Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

This policy pertains to agency review and approval procedures and is not pertinent to the Applicant's activities involving a private development application.

Fish and Wildlife Policies

Policy 7: Significant coastal fish and wildlife habitats will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

The Subject Property is located adjacent to a significant coastal fish and wildlife habitat (i.e., the Hempstead Harbor SCFWH). Pursuant to the permitting requirements of the NYSDEC and USACE, all work proposed within Hempstead Harbor would be subject to the conditions, regulations, and prohibitions typically included within the required regulatory agency permits. As described in **Section 3.4**, the permitting processes of the NYSDEC and USACE would involve consultations with the NYSDEC Bureau of Wildlife and USFWS, respectively, which may require additional avoidance or minimization measures to reduce the potential for adverse impacts to listed species noted as possibly occurring within this habitat. Moreover, as part of the USACE permitting process, the NOAA National Marine Fisheries Service (NMFS) will review the Proposed Action for potential adverse impacts to Essential Fish Habitat for 14 species of finfish that occur within Hempstead Harbor, as described in **Section 3.4.3** of this DEIS. Pursuant to Section 7 of the Endangered Species Act, the NMFS will also review the Proposed Action for potential impacts to the endangered and threatened marine species identified as potentially occurring within Hempstead Harbor (Atlantic Sturgeon, Shortnose Sturgeon, and four sea turtle species), Based on the Essential Fish

Habitat and Section 7 reviews, the NMFS may impose seasonal, time-of-day, or other restrictions on dredging, pile driving and/or other proposed work, to avoid or minimize potential adverse impacts to species and their habitats within Hempstead Harbor.

The adherence to the conditions, regulations, and prohibitions set forth by these agencies would minimize, to the greatest extent practicable, potential adverse impacts to significant coastal fish and wildlife habitats and the species therein.

It also is noted that the Proposed Action would result in a 6,931±-SF net increase in tidal wetland area. Further, the Proposed Action would improve the value of the Subject Property's wetland areas by removing the numerous dilapidated features and debris (i.e., sunken barges, remains of the former dock), as well as remediating the subsurface contamination of the terrestrial portion of the Subject Property, as necessary. Overall, the Proposed Action would protect, preserve, and enhance the adjoining SCFWH, in accordance with this policy. The Proposed Action is therefore consistent with this policy.

Policy 8: Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sublethal or lethal effect on those resources

The proposed residential building would not involve the storage or use of hazardous materials, other than typical cleaning and maintenance products associated with the Proposed Building and its amenities (i.e., the proposed swimming pool). The Proposed Action would, therefore, not pose the potential for hazardous waste discharge or associated bioaccumulation and food chain impacts on local fish and wildlife resources. In fact, due to remediation of subsurface contamination at terrestrial portions of the Subject Property under the Brownfield or similar cleanup program, as well as removal of in-water structures, sunken vessels, and debris, the Proposed Action would involve the removal and disposal of hazardous materials from the Subject Property (see **Section 0**), and would, therefore, minimize the potential contamination of local fish and wildlife resources by same. The Proposed Action is therefore consistent with this policy.

See the response to Policy 7 for a discussion on measures incorporated into the Proposed Action to mitigate other potential (i.e., sublethal) impacts on ecological resources.

Policy 9: Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.

This policy pertains to governmental actions regarding the recreational use of fish and wildlife resources and, therefore, is not directly applicable to the Proposed Action. None the less, the Proposed Action would involve the construction of a proposed promenade, pier and marina providing private and public mooring locations. The Proposed Action would, therefore, expand and enhance public accessibility and enjoyment of the Subject Property's waterfront area, and would expand coastal-based recreational opportunities at the Subject Property. In addition, the Proposed Action would result in a 6,931±-SF net increase in tidal wetland area and, as such, would develop new resources, in accordance with this policy.

Policy 10: Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the State's seafood products, maintaining adequate stocks, and expanding aquaculture facilities.

This policy primarily pertains to governmental actions regarding commercial fish and wildlife resources and, in that respect, is not applicable to the Proposed Action.

Flooding and Erosion Hazards Policies

Policy 11: Buildings and other structure will be sited in the coastal areas so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Portions of the Subject Property are located within Special Flood Hazard Areas AE and VE. Consistent with the intent of this policy, the proposed improvements would be constructed in accordance with all applicable standards promulgated by FEMA and by the Town of North Hempstead (i.e., Chapter 21—Floodplain Management Regulations), which are designed to minimize hazards to human life and structures due to flooding and erosion. The Proposed Action's consistency with the relevant portions of Chapter 21 is discussed in detail in **Section 3.3.3** of this DEIS.

Policy 12: Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

The Subject Property does not contain, nor is it located proximate to, dunes, bluffs, or barrier islands. The Subject Property does contain an existing sand beach area, which, under the Proposed Action, would generally be left unaltered. Based on the above, the Proposed Action would not damage any such natural protective features, consistent with this policy.

In addition, the Proposed Action would involve the installation of proposed wave screens, which would dampen the energy and impact of incoming waves. These structures would help protect the proposed marina from wave action and erosion, consistent with the intent of this policy.

Policy 13: The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

The Proposed Action would involve the removal and replacement of the existing, dilapidated bulkhead with a new, intact bulkhead. The installation of the proposed new bulkhead would be subject to permitting by the NYSDEC and USACE, and the permitting process would involve technical review by these agencies to ensure that the objectives of this policy are met.

Policy 14: Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

See response to Policy 13, above.

Policy 15: Mining, excavation or dredging in coastal water shall not significantly interfere with the natural coastal processes which supply beach materials to land activities to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

In association with the construction of the proposed marina, the Proposed Action would require dredging and excavation. All dredging and excavation activities would be subject to permitting by the NYSDEC and USACE; the permitting process would ensure that the proposed dredging and excavation activities would be undertaken in a manner that would not significantly interfere with the natural coastal processes, nor cause an increase in erosion, in conformance with this policy.

Policy 16: Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

The Proposed Action does not involve the use of public funds for any such protective features. Therefore, this policy is not applicable to the Proposed Action.

Policy 17: Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Pursuant to Policy 17, non-structural measures include the flood-proofing of buildings and elevating buildings above the base flood level. As described above and detailed in **Section 3.3.3**, the Proposed Building's lowest finished floor would be raised to 19 feet amsl and would thereby be elevated to three feet above the corresponding BFE (i.e., 16 feet amsl). In addition, floors located below the BFE would incorporate breakaway exterior walls that would be designed to break under flood conditions; these walls would collapse without causing collapse, displacement, or other structural damage to the elevated portion of the Proposed Building or its supporting foundation system. As such, the Proposed Action incorporates non-structural measures to minimize damage from flooding, in accordance with this policy.

General Policy

Policy 18: To safeguard the vital economic, social and environmental interests of the State and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the State has established to protect valuable coastal resource areas.

It is respectfully submitted that the Proposed Action does not qualify as a "major action" within the coastal area. None the less, this DEIS demonstrates that the Proposed Action would not significantly impair valuable coastal waters and resources. At the conclusion of the

SEQRA EIS process, a findings statement will be adopted by the Lead Agency (and other involved agencies); same will be required to "weigh and balance relevant environmental impacts with social, economic and other considerations," pursuant to 6 NYCRR 617.11(d)(2) of the SEQRA regulations, consistent with this policy.

Public Access Policies

Policy 19: Protect, maintain, and increase the level and types of access to public water related recreation resources and facilities.

The existing private industrial use does not provide any public waterfront access on the Subject Property. In comparison, as noted in response to Policy 1, the Proposed Action would involve the construction of a marina providing private and public mooring locations. The proposed promenade and pier would also provide spaces that would accommodate educational and public, family-friendly events. In addition, the Proposed Action would expand public access to the waterfront from North Hempstead Beach Park. Consistent with the intent of this policy, the Proposed Action would, therefore, increase public access to the waterfront and provide a new water-related public recreational resource.

Policy 20: Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

The Subject Property is privately owned and would continue to be privately owned following implementation of the Proposed Action. However, as noted in response to Policy 19, the Proposed Action would involve the construction of a marina providing private and public mooring locations. The proposed promenade and pier would also provide public spaces that would accommodate educational and family-friendly events. The Proposed Action would, therefore, increase the level of public access to the waterfront, in accordance with this policy.

Recreation Policies

Policy 21: Water dependent and water enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast.

The Subject Property is currently privately owned and would continue to be privately owned following implementation of the Proposed Action. However, the Proposed Action involves the construction of water-dependent recreational resources (i.e., the proposed marina, public pier and promenade). The Proposed Action would therefore provide currently unavailable access for active (i.e., boating) and passive (e.g., sightseeing, photography, etc.), water-dependent recreation. Accordingly, the Proposed Action is consistent with this policy.

Policy 22: Development when located adjacent to the shore will provide for water-related recreation whenever such use is compatible with reasonably anticipated demand for such activities and is compatible with the primary purpose of the development.

As described previously, the Proposed Action involves the construction of a marina providing private and public mooring locations, as well as a public pier and promenade. The Proposed

Action would provide currently unavailable access for water-dependent recreation, in accordance with this policy.

Historic and Scenic Resources Policies

Policy 23: Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the State, its communities, or the Nation.

According to the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) Cultural Resource Information System (CRIS) database, as well as correspondence (**Appendix M**), no State or National Register-listed or eligible historic resources have been identified within, or substantially contiguous to, the Subject Property. Further, the Subject Property is not located within an area designated as archeologically sensitive. Furthermore, no local historic or cultural resources have been identified at or directly adjacent to the Subject Property. Therefore, the Proposed Action would not affect historic or cultural resources, in accordance with the intent of this policy.

Policy 24: Prevent impairment of scenic resources of statewide significance.

The Subject Property is not located within the vicinity of a scenic resource of statewide significance and, thus, does not have the potential to impair same. As such, this policy is not applicable to the Proposed Action.

Policy 25: Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

As discussed in **Section 3.14**, the Proposed Action has been designed with the overall goal to improve the visual conditions of the Subject Property and provide meaningful, enhanced public waterfront access that complements future proposed improvements to North Hempstead Beach Park. With this goal in mind, the Proposed Project has been designed to be a modern and aesthetically pleasing development that utilizes high-end materials and finishes. In addition, the mix of uses along Hempstead Harbor (i.e., the proposed pool and other residential amenities, the proposed marina, and the proposed public promenade and pier) would support the creation of a lively and vibrant waterfront atmosphere that improves public waterfront access. The increased public waterfront access would significantly enhance opportunities for public views of Hempstead Harbor which, though not designated as being of statewide significance, contributes to the overall scenic quality of the coastal area. Overall, the Proposed Action would enhance aesthetic conditions of the Subject Property and would provide enhanced views of Hempstead Harbor, in accordance with this policy.

Agricultural Lands Policy

Policy 26: Conserve and protect agricultural lands in the State's coastal areas.

The Proposed Action does not contain, nor is it located substantially contiguous to, agricultural lands. Therefore, this policy is not applicable.

Energy and Ice Management Policies

Policy 27: Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

The Proposed Action does not involve the siting or construction of a major energy facility. This policy is not applicable to the Proposed Action.

Policy 28: Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

The Proposed Action does not necessitate the use of any ice management practices. Therefore, this policy is not relevant to the Proposed Action.

Policy 29: The development of offshore uses and resources, including renewable energy resources, shall accommodate New York's long-standing ocean and Great Lakes industries, such as commercial and recreational fishing and maritime commerce, and the ecological functions of habitats important to New York.

As the Proposed Action does not involve the development of offshore uses or resources, this policy is not applicable.

Water and Air Resources Policies

Policy 30: Municipal, industrial, and commercial discharge of pollutants, including but not limited to, toxic and hazardous substances, into coastal waters will conform to State and National water quality standards.

As the Proposed Action does not involve the municipal, industrial, or commercial discharge of pollutants, this policy is not applicable.

Policy 31: State coastal area policies and management objectives of approved local Waterfront Revitalization Programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

This policy pertains to the State water quality classification program and, therefore, is not applicable to the proposed residential redevelopment of the Subject Property.

Policy 32: Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

The proposed development would be connected to the existing Port Washington Water Pollution Control District (out-of-district connection). Therefore, this policy, which encourages the use of alternative or innovative (i.e., on-site) sanitary systems, is not applicable to the Proposed Action. *Policy 33: Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.*

The proposed development would not involve a combined sewer system. Sanitary wastewater would be discharged to the Port Washington Water Pollution Control District; stormwater would be handled and managed on-site via a separate on-site system. As previously discussed in **Sections 3.3.3** and **3.4.3** of this DEIS, stormwater practices that are protective of coastal waters (i.e., no stormwater runoff into coastal waters) would be implemented under the Proposed Action, consistent with this policy.

Policy 34: Discharge of waste materials into coastal waters from vessels subject to State jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

As discussed in **Section 3.4.3**, Hempstead Harbor is a designated No Discharge Zone, making it illegal to discharge treated or untreated sewage from boats within the harbor. Boaters within Hempstead Harbor and other No Discharge Zones are required to dispose of sewage at pump-out stations. It is noted however that the proposed marina would not contain a pump-out station. As such, vessels would not be discharging or disposing of sewage at the proposed marina, in accordance with the intent of this policy.

Policy 35: Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State dredging permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

The proposed dredging would be subject to the relevant conditions, prohibitions, and best management practices established during the USACE and NYSDEC permitting processes. Such best management practices are anticipated to include, but not be limited to, the following:

- > The use of silt curtains, turbidity booms, and other in-water measures to avoid and minimize turbidity and siltation impacts to the water column and benthic habitats.
- Restriction of dredging operations to approved and site-specific seasonal dredging windows.
- > Containment of stockpiled dredged materials with silt fencing, straw bale enclosures, tarps, and other approved methods, as necessary.

Disposal of dredge materials would similarly be subject to USACE and NYSDEC conditions, prohibitions, and BMPs established during the permitting process. Overall, the BMPs employed under the Proposed Action would minimize, to the greatest extent practicable, the potential for adverse impacts associated with dredging.

Additional details regarding the proposed dredging, and the anticipated impacts of same, are discussed in **Section 3.4.3**.

In addition, the Proposed Action would involve some filling. However, the Proposed Action would result in a net gain of 6,931± SF of tidal areas/coastal waters, offsetting the proposed filling.

Overall, the proposed dredging would be undertaken in a manner that is consistent with State and Federal dredging permit requirements, and is protective of natural resources, in accordance with this policy.

Policy 36: Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

The Proposed Action does not involve the shipment or storage of petroleum or other hazardous materials. Further, the proposed marina would not include fuel pumps. As such, this policy is not applicable to the Proposed Action.

Policy 37: Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.

As discussed in **Section 3.3**, BMPs would be implemented to minimize the potential for nonpoint (i.e., stormwater-related) impacts to coastal waters. To mitigate potential non-point source impacts during construction, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented, which would include a detailed phasing plan, erosion and sediment control measures, post-construction control measures, and provisions for inspections and long-term operation and maintenance of the stormwater management system. Post-construction, all stormwater management infrastructure would be operated and maintained in accordance with the conditions of the SWPPP. With the foregoing and related measures in place, the Proposed Action would be consistent with this policy.

Policy 38: The quality and quantity of surface water and groundwater supplies, will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Sanitary wastes from the proposed residential building would be discharged to the Port Washington Water Pollution Control District, such that there would be no on-site discharges of sanitary waste to groundwater or associated impacts. Furthermore, the potable water supplied to the Subject Property would be via connection to the Port Washington Water District, from off-site groundwater wells. A comprehensive discussion regarding the Proposed Action's impact on groundwater and surface waters is contained in **Section 3.3** and **Section 3.4**, respectively. These sections demonstrate that the Proposed Action would generally be protective of groundwater and surface water, to the extent practicable, in accordance with the intent of this policy.

Policy 39: The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.

The proposed residential building would not generate hazardous wastes, other than those related to typical household products. Solid waste management for the proposed development would comply with municipal requirements, in accordance with this policy. Moreover, structures, debris, and potentially contaminated soils removed from the terrestrial

and wetland areas of Subject Property during site demolition and remedial activities would be disposed of off-site in accordance with all applicable regulatory standards. Therefore, the Proposed Action would be consistent with this policy.

Policy 40: Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

The Proposed Action does not involve a major steam electric generating or industrial facility. As such, this policy is not applicable.

Policy 41: Land use or development in the coastal area will not cause national or State air quality standards to be violated.

The Proposed Action involves the development of a residential building and marina, which are not uses that are generally associated with significant air emissions. As detailed in **Section 3.9**, no significant adverse impacts related to air quality are anticipated as a result of the Proposed Action. Therefore, the Proposed Action is consistent with this policy.

Policy 42: Coastal management policies will be considered if the State reclassifies land areas pursuant to the prevention of significant deterioration regulations of the Federal Clean Air Act.

This policy relates to State regulatory action under the Federal Clean Air Act and is not relevant to the Applicant's activities involving a private development application.

Policy 43: Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

The Proposed Action, which involves the development of a residential building and associated amenities, would not entail the emission of significant quantities of chemicals that are acid rain precursors, as would be the case with certain industrial uses or uses that generate heavy traffic. Accordingly, the Proposed Action is consistent with this policy.

Wetlands Policy

Policy 44: Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

As described in **Section 3.4**, the Proposed Action would be subject to review, regulation, and permitting by various regulatory agencies (i.e., NYSDEC, USACEs, USFWS, and NMFS). The Proposed Action would be subject to the conditions, regulations, and prohibitions set forth by these agencies, as well avoidance, minimization, and mitigation measures designed to protect and improve the Subject Property's tidal wetland areas.

The Proposed Action would result in a net increase of 6,931± SF of tidal wetland habitat within Hempstead Harbor, as well as the removal of existing dilapidated structures and debris from wetlands. The Proposed Action would also include the remediation of subsurface contamination at terrestrial portions of the Subject Property. The Proposed Action would thereby expand and improve these tidal areas. In addition, the Proposed Action would reduce impervious surfaces and associated stormwater runoff at the Subject Property by

nearly one acre. Moreover, the Proposed Action would result in the installation of stormwater management infrastructure at the Subject Property, in compliance with all New York State and local requirements for protection of wetland and aquatic resources. Water quality improvements within Hempstead Harbor are expected as a result.

Based on the foregoing, the Proposed Action would preserve and protect the tidal wetlands and the benefits derived from same, which would be consistent with this policy. In fact, quantitative and qualitative improvements to these tidal wetland areas are anticipated.

3.11.3.3 Nassau County Hazard Mitigation Plan

As noted previously, the Town's Annex of the *Hazard Mitigation Plan* did not include any proposed mitigation actions that pertained specifically to the Subject Property itself. However, the Town's Annex did provide proposed mitigation actions for the immediately adjacent North Hempstead Beach Park, and for the overall Port Washington area.

With regard to North Hempstead Beach Park, the Town's Annex proposed several measures that would alleviate/preclude flooding issues within the park. These measures include removing asphalt and concrete from the water way and boat ramp, restoring the park's bulkhead, and restoring wetlands. It is noted that the park's boat ramp is located with the southernmost portion of the park, approximately $0.63\pm$ miles south of the Subject Property. The Proposed Action would, therefore, not interfere with work proposed within the park's boat ramp. Similarly, the Proposed Action would not interfere with, or preclude, the restoration of the park's bulkhead, as the Proposed Action does not involve work in any portions of the Subject Property that are directly adjacent to the park (i.e., the existing sand beach area). Rather, by leaving these portions of the Subject Property relatively undisturbed, the Proposed Action would facilitate the future restoration of wetlands near this portion of the Subject Property, should the Town decide to do so as part of the North Hempstead Beach Park mitigation action. Overall, the Proposed Action would not interfere with or preclude the implementation and completion of the North Hempstead Beach Park mitigation action.

The Town's Annex also recommended rehabilitating drainage infrastructure within Port Washington to alleviate future flooding. It is noted that this recommendation primarily pertains to public drainage infrastructure. However, the Proposed Action would conform with this recommendation, as it would involve the installation of a modern stormwater management system. As described in **Section 3.3.3**, the proposed stormwater management system would be designed to adequately manage stormwater runoff generated within the Subject Property on-site. The proposed stormwater management system would thereby preclude off-site runoff onto adjacent properties or into the coastal waters, as currently occurs under existing conditions. The proposed stormwater management system would thereby minimize, to the greatest extent feasible, the potential for flooding within the Subject Property and within the immediately surrounding properties. Further, the Proposed Action would result in a net decrease in impervious surface coverage within the Subject Property, reducing net stormwater runoff generated on-site. Thus, the Proposed Action would help achieve the goals of this mitigation action by alleviating future flooding conditions within this portion of Port Washington.

Overall, the Proposed Action would not inhibit the future implementation of those mitigation actions proposed within the vicinity of the Subject Property. Rather, the Proposed

Action would help achieve the goals of same by contributing to the installation of modern drainage infrastructure and by decreasing the amount of impervious surface on the Subject Property.

3.11.4 Proposed Mitigation

Though no significant adverse impacts related to coastal resilience have been identified, various measures have been incorporated into the overall project design to ensure compliance with the prevailing regulations and relevant management plans and to improve coastal resiliency, including the following:

- > A SWPPP would be developed and implemented prior to construction; the SWPPP would be designed to be protective of coastal waters.
- > The Proposed Action would result in a net increase of exposed tidal areas.
- > Wave screens would be utilized to dampen the energy and impact of incoming waves in a manner that, as compared to traditional breakwater structures, is less physically intrusive.
- > The proposed marina and public pier and promenade would be designed to preclude adverse impacts from flooding. The proposed marina would utilize floating docks, which would rise and fall with the water elevation; other portions of the proposed marina and public pier and promenade would be designed to be inundated during a flooding event.

The lowest finished floor of the Proposed Building would be elevated to provide three feet of separation above its respective BFE. Same would also be elevated well above the projected sea level for the year 2100.

3.12 Greenhouse Gas Emissions

3.12.1 Regulatory Framework

The regulatory framework sets forth the specific regulations, plans and policies that govern the creation and reduction of greenhouse gases (GHG) in New York State. The following is a summary of such plans and policies.

3.12.1.1 New York State Energy Plan

The 2015 New York State Energy Plan⁹⁹ is "a comprehensive roadmap to build a clean, resilient, and affordable energy system for all New Yorkers." This plan outlined New York State's Reforming the Energy Vision (REV), which aimed to create a stronger and healthier economy by stimulating a vibrant private sector market to provide clean energy solutions to communities and individual customers throughout New York.

The New York State Energy Plan also sets forth various initiatives that, along with private sector innovation and investment, would put New York on a path to achieving specific clean energy goals targeted at reducing GHG emissions, increasing renewable energy production, and increasing state-wide energy efficiency. The initiatives are grouped into seven

⁹⁹ New York State Energy Planning Board. 2015 New York State Energy Plan. Available at: https://energyplan.ny.gov/. Accessed September 2021.

categories, which include: renewable energy, buildings and energy efficiency, clean energy financing, sustainable and resilient communities, energy infrastructure modernization, innovation and research and development (R&D), and transportation.

3.12.1.2 New York State Climate Leadership and Community Protection Act

As described in **Section 3.11**, the CLCPA was established in June 2019 to "adopt measures to put the state on a path to reduce statewide GHG by eighty-five percent by [2050] and net zero emissions in all sectors of the economy."¹⁰⁰ The CLCPA sets new goals for reducing statewide GHG emissions and ultimately aims to achieve net zero GHG emissions by setting emission reduction targets and promoting clean energy.¹⁰¹ The CLCPA also establishes the Climate Action Council to develop strategies to achieve these goals.

The CLCPA also directs the New York State Department of Environmental Conservation (NYSDEC) to establish rules and regulations to ensure compliance with statewide emissions reduction limits (40 percent reduction from 1990 emissions levels by 2030, and 85 percent reduction from 1990 emissions levels by 2050). These regulations must include:

...legally enforceable emissions limits, performance standards, or measures or other requirements to control emissions from greenhouse gas emissions sources and measures to reduce emissions from greenhouse gas emission sources that have a cumulatively significant impact on statewide greenhouse gas emissions, such as internal combustion vehicles that burn gasoline or diesel fuel and boilers or furnaces that burn oil or natural gas.

3.12.1.3 Guide for Assessing Energy Use and Greenhouse Gas Emissions in an Environmental Impact Statement

The NYSDEC's *Guide for Assessing Energy Use and Greenhouse Gas Emissions in an Environmental Impact Statement* (the "*NYSDEC EIS GHG Guide*") was established to identity the methods and boundaries for the assessment of energy use, GHG emissions, and mitigation measures for an EIS. The *NYSDEC EIS GHG Guide*, does not create new requirements under the State Environmental Quality Review Act (SEQRA), nor does it establish a threshold for the determination of significance under SEQRA. Rather, the *NYSDEC EIS GHG Guide* focuses on how energy use and GHG emissions should be discussed in an EIS. Specifically, the *NYSDEC EIS GHG Guide* concentrates on:

- > Establishing the boundaries for the assessment;
- > Quantifying indirect and direct carbon dioxide emissions from the project;
- > Quantifying emissions from waste generation;
- > Quantifying methane emissions from landfills; and
- > Providing a menu of possible mitigation options.

¹⁰⁰ The New York State Senate. Senate Bill S6599. Available at: https://www.nysenate.gov/legislation/bills/2019/s6599. Accessed August 2021.

¹⁰¹ The Natural Resources Defense Council. Unpacking New York's Big New Climate Bill: A Primer. Available at:

https://www.nrdc.org/experts/miles-farmer/unpacking-new-yorks-big-new-climate-bill-primer-0. Accessed September 2021.

3.12.1.4 Cleaner Greener Long Island Regional Sustainability Plan

The *Cleaner Greener Long Island Regional Sustainability Plan*¹⁰² (2013) (the CGLI Plan) was created to define a community-based vision for a more sustainable Long Island, and to set forth goals and strategies to attain this vision. The CGLI Plan addresses seven topics, including: economic development and workforce housing; energy; transportation; land use and livable communities; waste management; water management; and governance and implementation.

3.12.2 Existing Conditions

3.12.2.1 Pollutants of Concern

GHGs are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds. This property causes the general warming of the Earth's atmosphere, or the "greenhouse effect." Some GHGs, such as carbon dioxide (CO₂), occur both naturally and are emitted into the atmosphere through human activities. According to the *NYSDEC EIS GHG Guide*, there are six main GHGs: CO_2 , nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).¹⁰³

Increased concentrations of GHGs change the global climate, resulting in wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also felt locally.

GHGs differ in their ability to trap heat. To compare emissions of GHGs, compilers use a weighting factor called a Global Warming Potential (GWP), where the heat-trapping ability of one metric ton (1,000 kilograms) of CO₂ is taken as the standard, and emissions are expressed in terms of CO₂ equivalents (CO₂e) but can also be expressed in terms of carbon equivalents. The GHGs which are emitted as a result of human activities and their GWPs are presented in **Table 3-32**, below.

¹⁰² The Cleaner Greener Consortium of Long Island. *Cleaner Greener Long Island Regional Sustainability Plan*. Available at: https://regionalcouncils.ny.gov/sites/default/files/2018-04/CGLI_Plan_FINAL_1.pdf. Accessed September 2021.

¹⁰³ New York State Department of Environmental Conservation. *Assessing Energy Use and Greenhouse Gas Emissions in Environmental Impact Statements*. Available from: https://www.dec.ny.gov/docs/administration_pdf/eisghgpolicy.pdf. Accessed September 2021.

Greenhouse Gas	Common Sources	Global Warming Potential
CO ₂ - Carbon Dioxide	Fossil fuel combustion, forest clearing, cement production	1
CH_4 - Methane	Landfills, production and distribution of natural gas and petroleum, anaerobic digestion, rice cultivation, fossil fuel combustion	21-25
N ₂ O - Nitrous Oxide	Fossil fuel combustion, fertilizers, nylon production, manure	280-310
HFCs - Hydrofluorocarbons	Refrigeration gases, aluminum smelting, semiconductor manufacturing	140–11,700
PFCs - Perfluorocarbons	Aluminum production, semiconductor manufacturing	6,500–9,200
SF ₆ - Sulfur Hexafluoride	Electrical transmissions and distribution systems, circuit breakers, magnesium production	23,900

Table 3-32	Global Warming	p Potential for Primar	y Greenhouse Gases
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This analysis focuses on CO_2 , N_2O , and CH_4 (collectively as CO_2e) as there are no significant direct or indirect sources of HFCs, PFCs, or SF₆ associated with the Proposed Action.

3.12.2.2 Existing Greenhouse Gas Emissions

The main sources of GHG in New York State are transportation, building's heating and cooking, use of electricity, waste processing, and industrial sources. Over the past decade, efforts to reduce GHG emissions from the New York State power sector have made New York's electricity some of the cleanest in the nation; transportation is now the largest source of GHG emissions in New York.¹⁰⁴

To further reduce New York's GHG emissions, the New York State Energy Plan calls for a 40 percent State-wide reduction of GHG emissions (from 1990 levels) by 2030. To do so, the New York State Energy Plan calls for the use of renewable energy sources to supply 50 percent of the State's energy, and, as compared to 2012 levels, calls for a 23 percent decrease in building energy consumption levels. According to the CLCPA, the ultimate goal of the State is to reduce GHG emissions (from 1990 levels) by 85 percent by 2050.

To achieve the goals and standards outlined above, the State has created numerous initiatives aimed at reducing emissions from the transportation sector, the largest contributor of GHG emissions in the State, and from buildings, the largest consumers of energy. New York State is also working to reduce methane emissions, as well as hydrofluorocarbons, potent GHGs.

With regard to the transportation sector, State initiatives include the widespread installation of electric vehicle charging infrastructure and investments in cleaner transportation. With regard to building energy consumption (both electrical and thermal), the State has

¹⁰⁴ New York State Department of Environmental Conservation. *Reducing Greenhouse Gas Emissions*. Available from: https://www.dec.ny.gov/energy/99223.html. Accessed September 2021.

established several programs geared towards improving energy efficiency, including the New York Power Authority's BuildSmart Program and New York State Energy Research and Development Authority (NYSERDA) home and commercial energy efficiency programs.

According to the latest NYS GHG Inventory, total GHG emissions in New York State were 205.6 million metric tons of carbon dioxide equivalents ($MMtCO_2e$) in 2016. This value represents a 13 percent decrease from 1990 to 2016.¹⁰⁵

The Long Island 2010 Regional GHG Inventory,¹⁰⁶ which provides the most recent data for Long Island-wide and Town-specific emissions, indicates that total GHG emissions for Long Island were 36.0 MMt CO₂e. The total GHG emissions for the Town of North Hempstead were a little less than 4 MMtCO₂e, comprising less than 11 percent of Long Island's GHG emissions.

3.12.3 Potential Impacts

GHGs are not considered by the USEPA to be "criteria pollutants," nor are NAAQS established for same. Similarly, NYSDEC does not establish impact thresholds of significance for GHG emissions for evaluating proposed actions in accordance with SEQRA. However, NYSDEC has issued a policy for the assessment of GHG emission impacts, which sets forth guidance procedures for NYSDEC staff to utilize in reviewing EISs.

As indicated above, the *NYSDEC EIS GHG Guide* provides guidance for reporting GHG emissions associated with a Proposed Project, where applicable, thereby enabling decision-making agencies to assess GHG emissions impacts associated with a project and to make meaningful quantitative and/or qualitative comparisons of reasonable alternatives to be considered.

GHG emissions are generally divided into three types (scopes), as illustrated in Figure 3-24.

¹⁰⁵ New York State Energy Research and Development Agency. New York State Greenhouse Gas Inventory: 1990-2016. Final Report. July 2019. Available from: https://www.nyserda.ny.gov/About/Publications/EA-Reports-and-Studies/Energy-Statistics. Accessed September 2021.

¹⁰⁶ New York State Climate Smart Communities. *Regional Greenhouse Gas Inventories in New York State.* Available at: https://climatesmart.ny.gov/support/regional-greenhouse-gas-inventories-in-nys/. Accessed September 2021.





Source: Green Element. Carbon Footprint: Simplifying Scope 1, 2 & 3.107

Scope 1, or direct emissions, are emissions resulting from the fossil fuel combustion by the Proposed Building or by vehicles owned or operated by the Proposed Building management. Emissions from HVAC systems are the most typical source of GHG emissions for new building projects. Scope 2, or indirect emissions, are emissions from the generation of purchased electricity used by the building. Scope 3 are all other GHG emissions, including emissions from the vehicular trips generated by the Proposed Building, like residents' commuting and other trips.

Contribution of a Proposed Project's GHG emissions to global GHG emissions is generally relatively insignificant when measured against the scale and magnitude of global climate change. However, certain projects' contribution of GHG emissions still should be analyzed to determine their consistency with the New York State's GHG reduction goals, which is in-line with the *NYSDEC EIS GHG Guide*. As noted above, this policy is considered the most appropriate for a project under SEQR (6 NYCRR Part 617). The GHG consistency assessment focuses on those projects that have the greatest potential to produce GHG emissions and evaluates their potential to result in significant inconsistencies with the GHG reduction goals and mitigation plans.

As previously discussed, the Proposed Project involves construction of a 176-unit, 262,953±gross square-foot (GSF), residential building with associated parking and recreational amenities on the east side of West Shore Road, adjacent to Hempstead Harbor. Total GHG

¹⁰⁷ Green Element. *Carbon Footprint: Simplifying Scope 1, 2 & 3.* Available at: https://www.greenelement.co.uk/blog/carbon-footprint-scope-1-2-3/. Accessed October 2021.

emissions from parking are low compared to emissions from the generated vehicle trips and, thus, are not included in the analysis.

The Proposed Action would generate both direct and indirect GHG emissions. The direct GHG emissions would include emissions from the Proposed Building's HVAC systems. The indirect GHG emissions would include power generation related to demand from the Proposed Action. Emissions from the vehicle trips generated by the Proposed Action (e.g., vehicle trips by residents and outside deliveries, as well as the proposed shuttle) were also assessed. The Proposed Action is not expected to fundamentally impact the waste management system and, therefore, emissions from solid waste were not considered.

Direct Greenhouse Gas Emissions

The direct GHG stationary source assessment estimates GHG emissions associated with the project-related stationary sources, such as fuel burning and estimated gas consumption, as required by the *NYSDEC EIS GHG Guide*.

The Proposed Building would utilize natural gas for on-site HVAC and hot water systems. Direct emissions from the operation of the natural gas-fired boilers of HVAC systems in the Proposed Project would result in a total of 403.5 metric ton (MT) of CO_2e annually as shown in **Table 3-33**.

		Unit
Annual Residential Energy Use Intensity	45.5	MBtu ¹ /SF
Proposed Building	262,953	GSF
HVAC CO ₂ e	403.5	MT CO ₂ e

Table 3-33 Direct GHG Emissions from Natural Gas-Fired HVAC Systems

¹ Thousand British thermal units

In addition, the Proposed Project would provide a shuttle that will offer residents the option for a shared ride to the LIRR train station instead of driving. The proposed shuttle would generate an additional 66 MT of CO_{2e} a year. Direct GHG emissions for the Proposed Project would therefore total approximately 470 MT of CO_{2e}.

Indirect Greenhouse Gas Emissions

The indirect GHG emissions calculated herein are composed of stationary source emissions from off-site combustion related to the on-site electricity consumption of the Proposed Action. The anticipated on-site energy consumption is used to estimate GHG emissions at the source of electricity generation. GHG emissions associated with the consumption of electricity by the end uses is required by the *NYSDEC EIS GHG Guide*.

Estimates of the GHG emissions from the electricity are presented in **Table 3-34**. A total of 714.9 MT of CO₂e per year would be generated to satisfy the Proposed Project's annual electricity consumption.

Туре	Amount	Unit
Building Electricity Consumption	1,042.5	MWh ¹ /year
Electricity CO ₂ e	714.9	MT CO ₂ e

Table 3-34	Indirect GHG	Emissions from	Electricity	Generation
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¹ megawatt hours

Mobile Source Emissions

As shown in the TIS (see **Appendix J**), the Proposed Project would generate a number of incremental trips by cars and trucks. The trips would be predominantly made by automobiles, except for approximately five percent that will be by truck. Annual vehicle miles traveled (VMT) was estimated based on the weekday trips and the average distances as provided by the project team traffic engineers. The average local trip was assumed to be 10 miles and the average extended area trip was assumed to be 40 miles per vehicle. It was also assumed that half of the trips are made on arterial roads and half on expressways. An emissions calculator provided in the 2020 *City Environmental Quality Review Technical Manual*¹⁰⁸ for Queens County was conservatively used for Nassau County, which is considered to be slightly less congested, to obtain an estimate of automobile and truck CO₂e emissions attributable to the Proposed Action. The resultant GHG emissions are presented in **Table 3-35**. The total CO₂e emissions from the mobile sources attributable to the Proposed Action would be 2,287.1 MT, annually.

Vehicle Type	Annual VMT generated	Annual CO ₂ e [MT]
Automobile	5,727,645	1,875.5
Truck	301,455	411.6
Total	6,029,100	2,287.1

Table 3-35 GHG Emissions from Mobile Sources

Total Greenhouse Gas Emissions

Combining the direct, indirect, and mobile source GHG emissions, operation GHG emissions of the Proposed Action are expected to result in approximately 3,472 MT of CO₂e per year.

The Proposed Action's resulting GHG emissions would comprise a small fraction of the total GHG emissions of New York State, Long Island, and the Town of North Hempstead. Specifically, the Proposed Action would be expected to contribute less than 0.002 percent of total New York State GHG emissions, approximately 0.01 percent of total Long Island GHG emissions, and around 0.09 percent of total Town of North Hempstead GHG emissions. Overall, the Proposed Action would not significantly contribute to GHG emissions in the local area or region.

¹⁰⁸ New York City Office of Environmental Coordination. 2020 Technical Manual. Available at: https://www1.nyc.gov/site/oec/environmentalquality-review/technical-manual.page. Accessed October 2021.

Construction Emissions

Construction emissions associated with construction of the Proposed Project have been assessed qualitatively. Typical efficient construction emissions and emissions of embodied carbon¹⁰⁹ (**Figure 3-25**) can equate to about 16 to 20 years of a building's operational GHG emissions,¹¹⁰ i.e., approximately 55,552 to 69,440 MT of CO₂e. The actual amount of CO₂e could change depending on the efficiency of building operations, as well as the efficiency of construction activities and the use of sustainable practices during same.



Figure 3-25 Embodied Carbon of a Building

Source: Institute for Market Transformation. Should I Stay or Should I Go: The Embodied Carbon of Buildings.

Construction of the Proposed Project would follow New York State regulations and codes for construction, which incorporate carbon reduction measures. These include reduction of diesel emissions, limitation of idle time for vehicles and equipment and other measures that reduce carbon emissions during construction. Other mitigation measures for operation and construction of the Proposed Action are described below.

¹⁰⁹ Emissions released during the fabrication and transportation of construction materials used in building construction.

¹¹⁰ Institute for Market Transformation. Should I Stay or Should I Go: The Embodied Carbon of Buildings. Available at:

https://www.imt.org/should-i-stay-or-should-i-go-the-embodied-carbon-of-new-and-existing-buildings/. Accessed October 2021.

3.12.3.2 Consistency with Relevant Plans and Regulations

New York State Energy Plan

New York State Energy Plan sets forth a number of initiatives aimed at reducing GHG emissions, promoting the use of renewable energy sources, and increasing energy efficiency. It is noted that these initiatives primarily pertain to various State agencies (i.e., NYSERDA, NYSDEC, NYSDOS), energy and utility providers, and/or local municipalities, outlining actions that these entities can take to work towards the goals noted above. None of the initiatives directly pertain to private developers or property owners, nor do they provide recommendations/directives pertaining to private development projects. As such, the initiatives outlined within the New York State Energy Plan do not directly pertain to the Proposed Action.

However, it is noted that the Proposed Action incorporates several design features that, in accordance with the overall intent and purpose of the New York State Energy Plan, would reduce the Proposed Action's energy demands and corresponding GHG emissions, as previously described above. Thus, the Proposed Action would contribute to achieving the goals of the New York Energy Plan by utilizing renewable energy sources (i.e., the proposed 40 kW per day solar array), improving building efficiency, and ultimately reducing GHG emissions.

New York State Climate Leadership and Community Protection Act

As previously described, the CLCPA mandates the CAC and the NYSDEC establish practices and standards to reduce state-wide GHG emissions.

The CLCPA requires the CAC develop a Scoping Plan that will make recommendations on regulatory measures and other state actions that will ensure the attainment of the CLCPA's standards.¹¹¹ A Draft Scoping Plan was published in January 2022 and is currently published for public review. As the Draft Scoping Plan has not yet been finalized, recommendations on regulatory measures and other state actions have yet to be established. Accordingly, at the time of writing of this DEIS, there are no regulations that can be acted upon, nor are there any effective standards to compare the Proposed Action to.

A main tenet of the CLCPA's plan to reduce GHG emissions is the increased use of cleanenergy sources, which would provide electricity for end-use customers (i.e., the Proposed Action) while minimizing the amount of GHG emissions produced in the process. Widespread employment of such energy sources will significantly reduce state-wide GHG emissions as compared to conventional fossil-fuel based energy systems.

It is anticipated that the future regulations and requirements enacted under the CLCPA, based upon the CAC's forthcoming final Scoping Plan, will require energy providers to utilize clean-energy systems. However, until energy providers make that transition, end-users will continue to be supplied with conventionally source energy. The Proposed Action would therefore continue to rely on conventionally source energy provided by the energy provider (i.e., PSEG Long Island), until same makes a complete transition to clean-energy systems. Still, it is noted that the Proposed building would include the installation of a 40 kW per day solar

¹¹¹ Columbia Law School. *Prepare a draft Scoping Plan*. Available at: https://climate.law.columbia.edu/content/prepare-draft-scoping-plan. Accessed September 2021.

array, which would be used to power the building's common areas and parking areas. Thus, the Proposed Action would offset a portion of the overall electricity demand that would be sourced from conventional energy systems, reducing the need for same. The Proposed Action would, therefore, satisfy a portion of its energy demand through a clean-energy system and would reduce the reliance on conventional energy systems, in accordance with a main tenet of the CLCPA.

The CLCPA requires that the NYSDEC adopt limits on state-wide GHG emissions for the years 2030 and 2050. In accordance with this requirement, the NYSDEC has estimated the state-wide GHG emissions level of 1990 and has set forth state-wide emission limits for the years specified, as a percentage of estimated 1990 state-wide GHG emission levels of 60 percent and 15 percent, respectively.¹¹² The CLCPA also requires that the NYSDEC prepare an annual report on state-wide GHG emissions to document the State's progress towards achieving the adopted emissions limits.

The GHG emissions limits adopted by the NYSDEC pertain to state-wide emissions; the Proposed Action, therefore, plays a role in helping achieve these limits however small the contribution it makes to the overall GHG emissions in Long Island and New York State, as described above.

Cleaner Greener Long Island Regional Sustainability Plan

As noted above, the CGLI Plan was created to define a community-based vision for a more sustainable Long Island, and to set forth goals and strategies to attain this vision. The CGLI addresses seven topics, including: economic development and workforce housing; energy; transportation; land use and livable communities; waste management; water management; and governance and implementation.

With regard to energy, the goals and strategies outlined in the CGLI plan are aimed at increasing energy efficiency, reducing energy use, and promoting clean, renewable power generation. The majority of the goals and strategies pertain to existing buildings, local municipalities, and energy and utility providers. The latter would affect indirect GHG emissions of the Proposed Action. Additionally, the CGLI plan includes a goal to "improve energy efficiency of new building stock." To do so, the CGLI outlines the following strategies:

- Promote adoption of more stringent local Energy Efficiency Construction Code by municipalities.
- > Provide incentives (such as property tax waivers) for new homes that meet the Passive House standard.
- > Provide enhanced sustainable and energy conservation training of design professionals.

These strategies do not directly pertain to the construction of new buildings by private developers, nor do they recommend any specific energy saving measures that should be included in the Proposed Project plan. Still, as noted below, the Proposed Action would incorporate energy saving measures that, in accordance with the intent of this goal, would increase building efficiency and reduce overall energy demands.

¹¹² New York State Department of Environmental Conservation. Adopted Part 496, Statewide Greenhouse Gas Emission Limits. Available at: https://www.dec.ny.gov/regulations/121052.html. Accessed September 2021.
The remaining goals and strategies of the CGLI are not relevant to energy use and/or GHG emissions and are not discussed in this section.

3.12.3.3 Conclusion

Operations of the Proposed Action would contribute to the GHG emissions mostly by combustion of fossil fuels for the HVAC and hot water systems on-site, by consuming electricity, and by the incremental mobile vehicle trips generated by the Proposed Project. During construction, it is estimated that the Proposed Project could contribute as much as the equivalent of 16 to 20 years of operational GHG emissions. However, GHG emissions generated by the Proposed Project would comprise a very small fraction of a percent of the State, Long Island, or Town of North Hempstead GHG budgets.¹¹³ In addition, as described below, numerous mitigation measures would be undertaken by the Proposed Action to reduce the overall GHG emissions of same.

3.12.4 Proposed Mitigation

The SEQR Handbook suggests incorporating design measures to reduce the amount of GHG emissions produced by a proposed action. In accordance with this recommendation, the Proposed Action would incorporate various measures designed to conserve energy which, in turn, would reduce GHG emissions associated with the project. These measures include the following:

- > The Proposed Project would operate a shuttle to the train station that would reduce annual VMT from local trips.
- > The installation of insulation barriers between parking areas and residential/amenity spaces to minimize heat loss/gain.
- > The installation and utilization of high-efficiency appliances (i.e., furnaces, water heaters, stoves/ovens).
- > The installation and utilization of high-efficiency direct expansion air condition (DX A/C) units to heat and cool residential units and common spaces.
- > The installation of a 40 kW per day solar array to power common areas and parking areas.
- > The installation of highly reflective white Thermoplastic Polyolefin (TPO) roofing to minimize heat absorption and reduce cooling needs.

The Proposed Action would also provide accommodations for shared/non-motorized modes of transportation, which would reduce the dependence on private automobiles and the resulting GHG emissions of same. Such accommodations would include:

- > The proposed shuttle to/from the nearby train station.
- > Bicycle storage facilities.
- > Improved pedestrian connections.

¹¹³ Refers to the overall GHG emissions of the respective geographies.

Further, the Proposed Action would incorporate other design measures that, as suggested within the *NYSDEC EIS GHG Guide*, would reduce GHG emissions from operations of the Proposed Project. Such measures would specifically include:

- > The use of water-efficient landscaping.
- > A marketing/information program that provides residents with ride sharing transit (i.e., the proposed shuttle) information.
- > The promotion and facilitation of recycling.

3.13 Use and Conservation of Energy

3.13.1 Regulatory Framework

3.13.1.1 New York State Energy Conservation Construction Code

The Energy Conservation Construction Code of New York State (ECCCNYS) requires that all government, commercial, and residential buildings in the State, including renovations involving building system replacement, follow the 2018 International Energy Conservation Code (IECC). The 2018 IECC Residential Provisions regulate the design and construction of new residential buildings; additions to, alterations of, and/or renovations of existing residential buildings for the use and conservation over the life of each such residential building. The 2018 IECC Residential Provisions are intended to provide flexibility to permit the use of innovative approaches and techniques to achieve the objectives above.

3.13.2 Existing Conditions

Electricity is currently provided to the Subject Property by PSEG Long Island. According to the Phase I ESA conducted by VHB in June 2020, electricity is used for the Subject Property's current heating needs; natural gas is not currently utilized at the Subject Property.

3.13.3 Potential Impacts

Implementation of the Proposed Action would require the use of energy for both the construction and future operation of the Proposed Building, as described below.

3.13.3.1 Construction

Construction of the Proposed Building, as well as the other project components (i.e., the proposed marina), would require the use of various power tools and mechanical equipment, including the following:

- > Pile driver
- > 4 80-foot boom lifts
- > 2 tower cranes
- > 2 front end loaders
- > Track hoe

- > Bulldozer
- > Multiple road trucks for deliveries and moving material.

In addition to the diesel-powered equipment detailed above, it is anticipated that construction activities will require a power source in the form of an electrical connection or a diesel-powered generator. Primarily diesel- or gasoline-powered vehicles would be used for construction worker trips to and from the Subject Property.

3.13.3.2 Operation

The Proposed Building would utilize a combination of electricity and natural gas to meet its energy demands. According to the project MEP (Mechanical, Electrical, and Plumbing engineer), Bala CSI Consulting Engineers, Inc. (Bala), the Proposed Building would generate the following electrical demands:

- > Annual Usage: 2,200,000 kWh
- > Electrical Loads: 3,600 kW connected.

According to Bala, the Proposed Building would generate the following natural gas demands:

- > Annual Usage: 80,000 therms
- > Natural Gas Loads: 37,000 cubic feet per hour (CFH) connected load.

Consultations were undertaken with the respective service providers to confirm service availability for the Proposed Building. Responses from PSEG-Long Island and National Grid are pending and information will be incorporated when received.

It is noted that the proposed marina does not include any fueling facilities.

The Proposed Building has been designed to meet or exceed the relevant portions of all other applicable building and energy codes (i.e., ECCCNYS requirements).

The Proposed Action is not seeking LEED certification or any other environmental accreditation. However, the Proposed Building has incorporated various measures designed to conserve energy, including:

- > The installation of insulation barriers between parking areas and residential/amenity spaces to minimize heat loss/gain.
- > The installation and utilization of high-efficiency appliances (i.e., furnaces, water heaters, stoves/ovens).
- > The installation and utilization of high-efficiency direct expansion air conditioning (DX A/C) units to heat and cool residential units and common spaces.
- > The installation of a 40 kW per day solar array to provide power to common areas and parking areas.
- > The installation of highly reflective white Thermoplastic Polyolefin (TPO) roofing to minimize heat absorption and reduce cooling needs.

In addition, the Proposed Action would provide accommodations for shared/non-motorized modes of transportation, which would reduce the dependence on private automobiles and the resulting energy consumption. Such accommodations would include:

- > A proposed shuttle to and from the nearby train station
- Bicycle storage facilities
- > Improved pedestrian connections to nearby community destinations.

Overall, in consideration of the proposed energy conservation measures, operation of the Proposed Action would not result in significant adverse energy impacts.

3.13.4 Proposed Mitigation

The construction and operation of the Proposed Building, and the other project components, would not result in significant adverse energy impacts. As described above, the Proposed Action has incorporated various measures to reduce energy consumption and minimize the potential for significant adverse impacts.

3.14 Aesthetics and Cultural Resources

3.14.1 Regulatory Framework

This section of the DEIS discusses the aesthetic character of the Subject Property by means of descriptive narrative and representative photographs. Potential changes to visual character are evaluated and graphical depictions, including elevations and perspectives of the Proposed Action from various vantage-points are provided. Aesthetic characteristics of the Proposed Action (i.e., architectural features, screening, landscaping, etc.) are detailed and accompanied by illustrative materials including building elevations and architectural renderings that depict post-development conditions.

Potential lighting impacts are discussed, including an analysis of how the Proposed Action considers ambient light levels in the surrounding areas, and compliance with the standards for light fixtures set forth in § 70-217 of the Town of North Hempstead Code. An evaluation of potential impacts due to temporary construction lighting is also provided.

This section of the DEIS documents the presence of nearby properties of historic significance or potential for archaeological sensitivity based on a review of the database and maps of the OPRHP, and the list and map of locally designated historic landmarks provided by the Town of North Hempstead for inclusion in the analysis.

3.14.2 Existing Conditions

3.14.2.1 Aesthetics

Existing aesthetic conditions were identified and documented during a site visit and field inventory of parcels within the primary and secondary Study Areas, conducted on July 27, 2021. Existing condition photographs of the Subject Property and surrounding area are included below (see **Figure 3-26** for photo map).

Subject Property

The aesthetic character of the Subject Property is defined by its current use as a sand and gravel storage facility, and its waterfront location along Hempstead Harbor. Large piles of

sand and gravel, and associated machinery (i.e., cranes, trucks, etc.), and an existing onestory concrete building and one-story masonry storage building dominate the visual landscape. Views of the Subject Property from West Shore Road are obstructed by existing vegetation and wooden fencing; however, portions of the site interior are visible from the roadway at the main entrance to the Subject Property from West Shore Road (**Photo 3-31** through **Photo 3-32**).

Existing dilapidated wooden pilings and steel cribbing extend into the underwater portion of the Subject Property and several sunken barges can be seen on the north side of an existing pier supported by a concrete bulkhead. These deteriorating structures, along with large piles of sand and gravel and on-site machinery, are highly visible from North Hempstead Beach Park and Hempstead Harbor (**Photo 3-33** and **Photo 3-34**).

Figure 3-26: Photograph Locations: Aesthetics and Cultural Resources West Shore Residences



145 West Shore Shore Road, hamlet of Port Washington, Town of North Hempstead, Nassau County, New York



Secondary Study Area

-

Subject Property

Photo 3-31 Subject Property Entrance



From West Shore Road facing east toward the Subject Property entrance.

Photo 3-33 Underwater Portions



Vehicles and gravel piles associated with existing site operations.

Photo 3-34 Sunken Barge



Deteriorated timber and steel structures visible at the underwater portions of the Subject Property.

Primary Study Area



Sunken barge visible adjacent to the concrete bulkhead.

The primary Study Area, (**Figure 3-26**), generally consists of a one-and-a-half-mile radius to the north, west, and south of the Subject Property. This radius incorporates several large land uses that contribute to the aesthetic character of the area, including the North Hempstead Aerodrome, the Harbor Links Golf Course, North Hempstead Beach Park, and the large industrial parks along Seaview Boulevard and Harbor Park Drive.

The Aerodrome is owned by the Town of North Hempstead and is used for the operation of radio-controlled model aircraft. Visibility of the Aerodrome from the public-rights-of-way is limited due to the presence of existing vegetation surrounding the site (**Photo 3-35**).

The Harbor Links Golf Course, also owned by the Town of North Hempstead, consists of an 18-hole golf course, a clubhouse, and athletic fields. Similar to the Aerodrome, dense vegetation and wooded areas surrounding the Golf Course limit its visibility for the public-rights-of-way within the primary Study Area (**Photo 3-36**).

The topography of the primary Study Area, which generally slopes down towards Hempstead Harbor from west to east, also affects area aesthetics. A steep ridge line extends along the western boundaries of both of the golf course and Aerodrome properties, generally limiting views facing west from West Shore Road.

Immediately south of the Subject Property is North Hempstead Beach Park, a 60-acre park and beach with a waterfront promenade, large surface parking, and recreational courts and playground equipment (**Photo 3-37**). North Hempstead Beach Park provides visitors direct expansive visual and recreational access to Hempstead Harbor.

The southernmost portion of the primary Study Area principally consists of two industrial parks centered on Seaview Boulevard and Harbor Park Drive. The built conditions along these roadways include large footprint one- and two-story commercial and industrial warehouse, manufacturing, and distribution buildings surrounded by landscaped lawn areas and surface parking (**Photo 3-38**).

Photo 3-35



View toward the Town of North Hempstead's Aerodrome, on the west side of West Shore Road, facing west.





View of the entrance to the Harbor Links Golf Course, facing west from West Shore Road.





North Hempstead Beach Park waterfront promenade and expansive parking area, facing southeast.

Photo 3-38



View of the industrial parks located south of the Subject Property, facing southwest.

The primary Study Area is also comprised of several residential neighborhoods, centered on the Port Washington commercial and mixed-use downtown and LIRR train station, which is approximately 7,300 feet from the Subject Property. Residential neighborhoods in the primary Study Area include the Beacon Hill Bungalow Colony located along Hempstead Harbor, approximately 1,800 feet to the north of the Subject Property, the Beacon Hill neighborhood located approximately 2,900 feet further upland along Beacon Hill Road and its side streets, as well as residences approximately 2,700 feet southwest of the Subject property along and adjacent to Port Washington Boulevard. As shown in **Photo 3-39** and **Photo 3-40**, these residential neighborhoods primarily consist of single-family homes along winding, mature tree-lined streets, with overhead utility wires. Though these single-family residential neighborhoods vary in lot size and architectural features, the aesthetic character is that of a suburban residential area, with homes setback from the roadway and ample front yard landscaping.

Two more densely developed residential areas within the primary Study Area are located within a private community to the southwest of the Subject Property. The Amsterdam at Harborside is a retirement and independent living multi-family building containing 329 apartment units and is approximately 2,550 feet southwest from the Subject Property. It is six stories, set back from the roadway, and surrounded by landscaping, though it is still visible from the public right-of-way due to the height of the building (**Photo 3-41**). Immediately to the west is the HarborView complex, containing 125 single-family homes and a 145-unit six-story condominium building. The HarborView complex is mostly screened from public view with tree cover and landscaping (**Photo 3-42**). These two residential buildings, which are located approximately half a mile from the Subject Property, are the tallest structures within the primary Study Area.

Photo 3-39



Beacon Hill Bungalow Colony located to the north of the Subject Property, facing northeast.

Photo 3-40



Single-family residences within the Beacon Hill residential neighborhood, at the intersection of Ridge Road and Bogart Avenue facing south.

Photo 3-41



View of the six-story Amsterdam at Harborside multifamily residential development, facing northeast from Fairway Drive.





Front entrance gate to the HarborView development complex.

As detailed in **Section 3.5**, commercial uses within the primary Study Area are concentrated along Main Street, Port Washington Boulevard, and the smaller roadways surrounding the Port Washington LIRR station. These commercial areas have an aesthetic character consistent with that of a typical suburban main street, with one- and two-story commercial buildings with varying architectural features consisting of brick and/or stucco exterior faces along with more recently renovated and/or modern buildings and storefronts (**Photo 3-43** through **Photo 3-45**). Main Street, the primary commercial corridor, is a three-lane roadway with two parking lanes and pedestrian amenities including large brick or concrete sidewalks and crosswalks. Portions of Main Street are interspersed with several mixed-use buildings with retail or office on the ground floor and two or three floors of residential units above. Main Street also provides access to the LIRR station, a single-story gable-roofed building adjoining the LIRR tracks and surface parking lots (**Photo 3-46**).

Photo 3-43



Commercial uses along Port Washington Boulevard, facing northeast, with brick-lined crosswalk in the foreground.

Photo 3-44



Commercial and mixed commercial/residential uses along Main Street, facing northwest.

Photo 3-45



View of commercial uses along Main Street, facing northeast.

Photo 3-46



View of the Port Washington Long Island Rail Road Station, facing southeast.

Secondary Study Area

The secondary Study Area encompasses the central business district (CBD) in the Village of Roslyn and the Manhasset Bay waterfront along lower Main Street in Port Washington.

The Village of Roslyn CBD is located at the southern end of Hempstead Harbor, centered on Old Northern Boulevard and Main Street. Many of the downtown commercial and residential buildings have Victorian style features, contributing to the historic aesthetic character of the area (**Photo 3-47**). Although not located directly along Hempstead Harbor, the CBD roadways wrap around, and provide views of the Roslyn Pond. Buildings within the Roslyn CBD are typically between one and two stories tall, with some limited number rising to three stories. The overall aesthetic character of this area is that of a small, walkable, and historic downtown.

The Manhasset Bay waterfront area centered on lower Main Street in Port Washington is a mixed-use corridor with a variety of waterfront commercial, retail, open space, and residential buildings. While the architectural character of the corridor is varied, the mix of uses and built conditions with little or no setbacks from the lot line contribute to the sense of a walkable and active downtown corridor, more densely developed than the Village of Roslyn CBD. Waterfront parks and water-dependent uses including a marina contribute to the aesthetic character of this area. Building heights are typically between one and two stories for commercial buildings, with some taller residential buildings up to four stories (**Photo 3-48** and **Photo 3-49**).

Photo 3-47

Photo 3-48



View of the Roslyn CBD, facing east along Old Northern Boulevard.



Mixed-use corridor along lower Main Street in Port Washington, facing south.

Photo 3-49



Commercial uses along lower Main Street in Port Washington, facing northeast.

3.14.2.2 Historic and Cultural Resources

In order to determine whether known sites of cultural sensitivity exist on the Subject Property or within the immediate surrounding area, the publicly-available CRIS of the New York State OPRHP was consulted.¹¹⁴ Correspondence received from OPRHP on September 10, 2021 in response to a Project Notification submitted on September 6, 2021 (**Appendix M**) indicates that no known historic or cultural resources exist at or directly adjacent to the Subject Property, and the nearest State and/or National Register-eligible site (Harbor Acres Beach House Heitz Place Courthouse, USN 05970.000230) is located approximately 3,500 feet to the north of the Subject Property. The Subject Property is situated within an identified archaeological sensitive area.

In addition, the Town of North Hempstead maintains a list of Town-designated landmarks, pursuant to Chapter 27, *Historic Landmarks Preservation*, of the Town Code. A review of this list indicates that neither the Subject Property, nor any buildings thereon, nor any sites or buildings directly adjacent to the Subject Property have been designated as a Town landmark. The nearest Town landmark is the Monfort Cemetery, located approximately one mile west of the Subject Property near the intersection of Main Street and Port Washington Boulevard. The cemetery, also listed on the National Register of Historic Places, contains grave sites of early Dutch settlers buried from 1737 to 1892. Overall, no Town-designated landmarks are located in the immediate vicinity of the Subject Property.

The Town of North Hempstead adopted its *North Hempstead Cultural Master Plan* in June 2020. The document provides an inventory of existing arts and cultural assets in the Town and offers guidance and strategies to support arts and culture. As detailed in the plan, cultural venues near the Subject Property include the major open spaces (North Hempstead Beach Park and the North Hempstead Aerodrome) as well as the festivals that are hosted within these open spaces. No cultural assets were identified on the Subject Property.

3.14.3 Potential Impacts

3.14.3.1 Aesthetics

According to the New York State Department of Environmental Conservation (NYSDEC) guidance related to evaluating visual impacts under SEQR: "[a]n 'aesthetic impact' is the consequence of a visual impact on the public's use and enjoyment of the appearance or qualities" of relevant resources.¹⁰⁴ In accordance with this guidance, this section of the DEIS presents an analysis of potential aesthetic impacts to the Subject Property itself, as well as to the aesthetic character of the surrounding areas as a result of implementation of the Proposed Action.

The Subject Property

The aesthetics of the Subject Property would be altered considerably upon implementation of the Proposed Project. The existing industrial waterfront property containing piles of construction material, a limited number of one-story storage buildings, and dilapidated waterfront structures including a concrete platform, wood pilings, and the steel dry dock, would be replaced with a seven-story residential multi-family building and associated site improvements including surface parking, a waterfront pier and promenade and marina, and landscaping. The proposed residential building would be constructed to a height of 73'-3" to

¹¹⁴ New York State Office of Parks, Recreation and Historic Preservation. "Cultural Resource Information System." Available online at https://cris.parks.ny.gov/Default.aspx (accessed August 2021).

the top of the elevator overrun (as measured from the finished grade), with a roof height of approximately 69'-9". The parking levels would be partially below-grade such that only a portion of the parking would be visible at street level. The building massing would be oriented north-south, parallel to and set back from both the waterfront and West Shore Road to allow for an attractive, landscaped front entrance to the building and for the public waterfront amenities.

The Proposed Project has been designed as a modern and aesthetically pleasing development with high-end materials and finishes, with the overall goal to improve the visual conditions of the Subject Property and provide meaningful, enhanced public waterfront access that complements future proposed improvements to North Hempstead Beach Park, as shown in the conceptual site plan included in **Appendix C**.

The proposed residential building provides a variety of natural materials including a mix of colored brick, stucco, and glass windows, with wooden detailing and slat screening particularly along the parking levels to screen parking from public view. Colors and massing would be varied across the building frontages to provide visual breaks along the building facades and increase visual interest and architectural appeal. This visual interest would be further supported through the provision of balconies, terraces, and a consistent window pattern. A series of architectural renderings and building elevations have been prepared from numerous vantage points by the project architect and are provided in **Appendix N**. Representative views of the Proposed Project are provided from West Shore Road and Hempstead Harbor, and along the northern frontage of the proposed building. Elevations along all four building frontages are also provided.

The mix of uses along Hempstead Harbor, including the pool and other residential amenities, public promenade and pier, and marina, would support the creation of a lively and vibrant waterfront atmosphere that will draw visitors and residents. As shown in the project rendering A2.1 in **Appendix N**, existing wood pilings would be maintained along the proposed marina to preserve aspects of the industrial waterfront and existing character. This increased public waterfront access would significantly enhance opportunities for public views of Hempstead Harbor compared with the existing conditions of the Subject Property.

Project landscaping has also been designed to complement the proposed site uses and enhance the site aesthetics whilst incorporating native species, creating an attractive and inviting atmosphere for residents and visitors. A variety of vegetation and tree types would be planted, including shade trees and understory, evergreen trees and shrubs for screening, and ornamental grasses and groundcover/perennials. Shade trees would be concentrated along the site frontage along West Shore Road, within the surface parking area islands, and along the public pier to increase shading within the public amenities. Ten-foot buffer zone planting areas would be provided along the northern and southern property boundaries, with evergreen varietals, to provide maximum screening from adjacent uses. The proposed landscaping plan would also support a lush and inviting front entrance to the Subject Property from West Shore Road, with landscaped medians facilitating both vehicular and pedestrian access. A proposed conceptual Landscaping Plan is provided in **Appendix C**, and additional details are contained in **Section 3.4**, **Ecological Resources**.

While the Proposed Action would facilitate a significant change in visual conditions on the Subject Property, as detailed above, there are several existing multi-family residential buildings within the primary Study Area that are of a similar height and character to the

Proposed Project, including the six-story Amsterdam at Harborside development, such that the Proposed Project would not be out of character with the existing built conditions in the primary Study Area (discussed below).

Primary Study Area and Vantage Point Assessment

In order to evaluate the potential visual impacts of the Proposed Project on the primary Study Area, the Applicant prepared "before" and "after" views of the Subject Property from surrounding vantage points and nearby visual resources, including the following:

- > Beacon Hill Bungalow Colony (0.34 miles from the Subject Property)
- > Beacon Hill neighborhood (near Summit Road) (0.63 miles from the Subject Property)
- > HarborView senior residential community (0.5 miles from the Subject Property)
- > North Hempstead Beach Park (0.1 miles from the Subject Property)
- > Harry Tappen Beach (0.5 miles from the Subject Property).

Figure 3-27 shows the locations of these vantage points. In the case of private property, views were captured from the public rights-of-way closest to that location. As shown in **Figure 3-27**, there were three locations from which the Subject Property, and, therefore, the Proposed Project, would not be visible: the Beacon Hill Bungalow Colony, the Beacon Hill neighborhood near Summit Road, and the HarborView senior residential community. As shown in the representative photographs from these locations, the topography of the primary Study Area and existing dense tree and vegetative cover limit visibility. Existing vantage points as well as corresponding "proposed" visual conditions of the Subject Property, and Harry Tappen Beach, located across Hempstead Harbor from the Subject Property, are provided in **Vantage Point 4** and **Vantage Point 5**, and are analyzed below.

Figure 3-27: Vantage Point Assessment



West Shore Residences 145 West Shore Shore Road, hamlet of Port Washington,



Secondary Study Area

Vantage Point 1



View toward to the Subject Property from the entrance to the Beacon Hill Bungalow Colony at West Shore Road and West Shore Drive. The Subject Property is not visible from this location.

Vantage Point 2



View toward the Subject Property from the vicinity of 95 and 97 Summit Road. The Subject Property is not visible from this location.

Vantage Point 3



View toward the Subject Property from Fairway Drive adjacent to the HarborView senior residential community. The Subject Property is not visible from this location.

North Hempstead Beach Park

As shown in **Vantage Point 4**, the existing view of the Subject Property facing north from North Hempstead Beach Park, though somewhat obstructed by existing trees and other vegetation within the park's surface parking lot, is of the existing industrial facilities on the Subject Property, including vehicles and equipment, on-site single-story structures, and large piles of construction material. Although **Vantage Point 4** depicts the existing view from an interior location within North Hempstead Beach Park to provide a representative view from the park facilities, views from the northernmost parking area within the park would provide closer views of these industrial operations and materials, as well as the dilapidated structures on the Subject Property.

The Proposed Project would replace these dilapidated structures and would result in the removal of the industrial equipment and piles of construction material on the Subject Property, as well as most of the existing structures within the water. The rendering of this proposed view shows that the south side of the proposed residential building, including two stories of parking (partially below grade) with five stories of residential above, would be visible from North Hempstead Beach Park. Depending on the proximity of the viewer to the Subject Property, the additional Proposed Project amenities including the waterfront promenade, pier and marina would also be visible.

As depicted and described above, the Proposed Action would result in a change in visual conditions from North Hempstead Beach Park. However, from the locations of the most highly utilized park facilities, generally located to the south of the parking lot, these views would include a building in the distance that would not result in a significant adverse impact to existing aesthetic conditions in the park. The Proposed Project would not block views to significant nearby visual resources such as Hempstead Harbor. In addition, from locations closer to the Subject Property, it is the Applicant's opinion that visual conditions would improve on the Subject Property with the removal of the dilapidated site structures to be replaced with a new, modern multi-family building with improved landscaping and increased public access to the waterfront, thereby enhancing the views from the Beach Park.

Vantage Point 4: View from North Hempstead Beach Park—Existing





Vantage Point 4: View from North Hempstead Beach Park—Proposed

Harry Tappen Beach

Harry Tappen Beach is located across Hempstead Harbor from the Subject Property, in the Town of Oyster Bay. As shown in **Vantage Point 5**, the existing view of the Subject Property facing west across Hempstead Harbor from Harry Tappen Beach includes distant views of the existing industrial facilities on the Subject Property, including vehicles and equipment, piles of construction material, as well as the dilapidated waterfront structures, including the wooden pilings and steel dry dock. These views of the Subject Property are similar in character to the adjacent existing waterfront industrial properties immediately to the north of the Subject Property and are in contrast to the residential buildings that are visible in **Vantage Point 5** further to the north within the Beacon Hill Bungalow Colony.

As detailed above, the Proposed Project would replace the industrial equipment and structures on the Subject Property with the five-story multi-family building above two stories of parking. The rendering of this proposed view shows that the east side of the proposed residential building would be visible from Harry Tappen Beach. In addition, the waterfront amenities including the waterfront promenade and marina would also be visible.

As shown, the Proposed Action would result in a change in visual conditions on the Subject Property as viewed from Harry Tappen Park. The Proposed Project would be taller than the existing buildings on the Subject Property, and, therefore, more visually prominent along the waterfront and distinct from the other properties in its immediate surroundings. The Proposed Project would also block views to trees and other vegetation located along the west side of West Shore Road. As such, the Proposed Action would impact existing visual conditions from Harry Tappen Beach. However, the Proposed Project would incorporate several design features that would minimize its visual impact from across Hempstead Harbor, including the use of natural materials and vertical breaks in the building massing that create visual interest across the eastern frontage. In addition, though taller than existing conditions, the Proposed Project would be level with the lower tree line along the western waterfront of Hempstead Harbor as viewed from Harry Tappen Beach, which reduces the visual prominence of the proposed building. In addition, from locations closer to the Subject Property, such as within Hempstead Harbor, similar to the viewpoint above, it is the Applicant's opinion that visual conditions would improve on the Subject Property with the removal of the dilapidated site structures and addition of a new, modern multi-family building.

Vantage Point 5: View from Harry Tappen Beach—Existing





Vantage Point 5: View from Harry Tappen Beach—Proposed

Secondary Study Area

The secondary Study Area encompasses the CBDs in the Village of Roslyn and the Manhasset Bay waterfront along lower Main Street in Port Washington. In comparison to the general built conditions within the secondary Study Area, the Proposed Action would result in construction of a building that is taller and more densely developed than most of the surrounding area. However, the Subject Property is not visible from either of these CBDs, and, therefore, the Proposed Project would not have any direct effect on the aesthetics of the secondary Study Area.

Also, though not within the secondary Study Area, there are several developments either planned or under construction along the eastern waterfront of Hempstead Harbor, across from the Subject Property, that are of a similar character to the Proposed Project and would be visible from Hempstead Harbor. They include the four-story luxury waterfront condominium building, Residences at Glen Harbor, located in Glenwood Landing, and the Garvies Point waterfront residential development in Glen Cove (northeast of the Subject Property), of which the most western building along the waterfront will be ten stories in height. These other planned developments indicate that the Proposed Project would not substantially change the aesthetic conditions along the Hempstead Harbor waterfront, but rather would be part of a larger trend toward taller, more modern residential waterfront development in this area.

Lighting

With respect to lighting, § 70-217 of the Town of North Hempstead Code indicates,

A. All lighting of premises, other than places of public assembly, shall be directed away from any adjoining residences or public rights-of-way and shall not exceed a height of 20 feet above the grade of the premises. The location, candlepower and type of fixture to be installed shall be first approved by the Building Official.

B. All lighting shall be shielded so that direct glare shall not be visible from beyond any property line.

A conceptual Lighting Plan has been provided by the Applicant (see **Appendix C**) demonstrating the Proposed Project's compliance with the lighting requirements set forth above. As shown on the Lighting Plan, lighting fixtures not to exceed 20 feet in height would be provided along the building exterior, within the surface parking area, and along the proposed waterfront promenade and public pier to provide safe and inviting access to the project's waterfront amenities. As noted on the Lighting Plan, lighting would be directed away from the adjoining public right-of-way on West Shore Drive and would be shielded so that direct glare would not be visible from beyond any of the property lines, in compliance with § 70-217. Lighting within the proposed surface parking area and along the waterfront promenade would be of similar character to the existing lighting conditions within the adjacent North Hempstead Beach Park parking area and shoreline walkway, as to not adversely impact existing ambient lighting conditions within the area.

Further details regarding fixture types and candle power would be submitted and approved during site plan review. Fixture types would be chosen to support the overall modern aesthetic of the Proposed Project. In addition, temporary lighting required during the construction of the Proposed Project would only be used during the permitted hours of construction pursuant to the Town Code. As such, no significant adverse impacts to surrounding properties from the proposed site lighting are anticipated.

The Proposed Project has been designed so that it would be visually cohesive and appealing, enhanced by site lighting, landscaping, attractive architectural features, and other amenities specifically selected to create an open and inviting waterfront residential community that enhances the public's access and enjoyment of Hempstead Harbor. The Proposed Project would be a significant improvement to site aesthetics when compared with the dilapidated industrial character and structures that currently exist on the Subject Property. The Proposed Action would support transformation of the site from an underutilized industrial property to one that can be enjoyed by residents and visitors, as well as users of Hempstead Harbor and the North Hempstead Beach Park.

Accordingly, based on the foregoing analysis, the Proposed Action would not result in significant adverse aesthetic impacts to the Subject Property or the surrounding area.

3.14.3.2 Historic and Cultural Resources

As discussed in **Section 3.14.2**, above, no historic or archaeological resources have been identified within, or in the immediate vicinity of, the Subject Property. Furthermore, correspondence from the New York State Office of Parks, Recreation and Historic Preservation, dated September 10, 2021, indicates that "no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project" (see **Appendix M**). As

such, the Proposed Action would not result in a significant adverse impact to historic and cultural resources.

In addition, no arts or cultural venues were identified on the Subject Property in the *North Hempstead Cultural Master Plan*. However, North Hempstead Beach Park was identified as a Town cultural asset as an open space that can accommodate festivals and other cultural events. In regards to North Hempstead Beach Park, the Proposed Project would provide a public promenade and pier that would serve as a northward extension of the Hempstead Harbor Trail along the shoreline of North Hempstead Beach Park, which would be designed to pay homage to some of the site's history, speak to local marine and bird life, and provide space for public, family-friendly events. The Proposed Project would also provide additional surface parking to accommodate visitors to North Hempstead Beach Park. As such, the Proposed Project is consistent with the goals of the *North Hempstead Cultural Master Plan* by improving and complementing this existing Town cultural asset.

3.14.4 Proposed Mitigation

As detailed above, the Proposed Action would not result in significant adverse impacts to the aesthetic character of the site, or within the primary or secondary Study Areas. Several features have been incorporated into the project design to improve aesthetic conditions and minimize visual effects of the proposed new development on surrounding properties, including an extensive landscaping plan and attractive architectural features. Based on the analysis detailed above, aesthetic mitigation is not warranted beyond these measures.

In addition, as discussed above, no historic or archaeological resources have been identified within, or in the immediate vicinity of the Subject Property, and no significant adverse impacts to historic and cultural resources would occur. Therefore, no mitigation measures pertaining to cultural resources are proposed.

3.15 Fiscal and Economic Impacts

3.15.1 Regulatory Framework

The adopted Final Scope for this project serves as regulatory framework for this section. Specifically, the Final Scope indicates that this section is to examine existing population, total assessed valuation, current tax rates, taxes currently generated by the Subject Property, current operating budgets for special districts and service providers, detailed budgets and current tax rates and levies for the Town and County, and land use and tax base composition. The Final Scope also indicates that this section includes a property tax analysis, provide project service costs, and assess the potential for direct residential and business displacement, indirect residential and business displacement, and adverse effects on specific industries. Resources to be used include US Census data, information from the Nassau County Office of the Assessor, and the North Hempstead Receiver of Taxes.

3.15.2 Existing Conditions

3.15.2.1 Demographics

Port Washington has a total population of 15,808, per the 2019 American Community Survey Five-Year Estimates, which is approximately seven percent of the total population (230,531) of the Town of North Hempstead. Approximately 24 percent of the population is under 18, while 22 percent is over 65. Port Washington has 6,221 housing units, of which 5,694 housing units are occupied. Approximately 74% of occupied units are owner-occupied and 26% are renter-occupied. There are 5,694 households and median household income is \$141,667, which is higher than the median household income of the Town of North Hempstead (\$125,364).

Currently, the Subject Property contains no residential population. The existing business has three employees who work on the site.

3.15.2.2 Existing Property Tax Revenue

The Subject Property comprises tax lots Section 6—Block 053—Lots 1005A and 1005B. The Assessed Value for the combined lots is \$20,016 and the Transitional Assessed Value¹¹⁵ is \$10,081. Taxes for 2021 are based on the Transitional Assessed Value. The Subject Property generates \$8,391.73 in Town of North Hempstead taxes, \$5,575.09 in Nassau County taxes, \$26,473.82 in special district taxes, and \$19,865.16 in Port Washington UFSD taxes. The full breakdown of existing taxes is shown in **Table 3-36**.

¹¹⁵ The Transitional Assessed Value is an assessment used to phase in changes after revaluation so as to lessen shifts in the tax burden from one class of property to another.

	Tax Rate Per \$100 of	
Taxing Jurisdiction	Taxable Value ⁽¹⁾	Tax Amount
Town of North Hempstead Taxes		
Town General Fund	10.306	\$1,038.95
Town Highway	34.703	\$3,498.41
Town of North Hempstead Lighting District	3.931	\$396.28
Port Washington Fire Protection District	27.55	\$2,777.32
Port Washington Public Parking District	1.767	\$178.13
Town of North Hempstead	4.986	\$502.64
Total Town of North Hempstead Taxes	83.243	\$8,391.73
Nassau County Taxes		
County General Fund	4.052	\$408.48
Disputed Assessment Fund	24.363	\$2,456.03
County Environmental Board	1.015	\$102.32
Fire Prevention	1.757	\$177.12
Nassau Community College	4.773	\$481.17
County Police Headquarters	18.439	\$1,858.84
New York State Property Tax Refund Fund	0	\$0
Storm Water Resources Zone of Assessment	0.904	\$91.13
Total Nassau County Taxes	55.303	\$5,575.09
Special District Taxes		
Port Washington Water District	15.448	\$1,557.31
Port Washington Police District	223.021	\$22,482.75
Port Washington Garbage Removal District	24.142	\$2,433.76
Total Special District Taxes	262.611	\$26,473.82
Port Washington Union Free School District		
Net School Tax	375.637	\$37,867.97
Net Library Tax	18.474	\$1,862.36
Total Port Washington Union Free School District Taxes	394.111	\$39,730.33
Total All Taxes	795.268	\$80,170.97

Table 3-36 Existing Taxes (2021)

Notes:

¹ The taxable value for both lots for 2021 is the Transitional Assessed Value.

The 2022 Assessed Value for the Subject Property is \$12,845.

3.15.2.3 Municipal Operating Budgets

The Town of North Hempstead Adopted Budget for FY 2021 includes the Town's General Fund, the Town Outside Village Fund, and 46 Town-Operated and Commissioner-Operated Special Districts. The Town's General Fund includes the following Departments: Administrative Services, Community Services, Services for the Aging, Human Resources, Information Technology, Parks and Recreation, Public Safety, and Public Works, as well as, the Comptroller's Office, 311 Call Center, the Receiver of Taxes, Supervisor's Office, Town Attorney, Town Board, and Town Clerk. The total adopted budget for the General Fund is \$71,117,284, of which \$26,047,300 (or 37 percent) is expected to be paid through taxation. The budget for the Department of Public Safety is \$1,678,116, or approximately 2 percent of the General Fund budget.

The tax levy for the Town of North Hempstead General Fund is primarily paid by Class I Residential Properties (one-, two-, and three-family homes and condominiums of three stories or less), which pay 78 percent of the tax levy. Class II Residential Properties (apartments, residential cooperatives, and condominiums of four stories or more) pay 4 percent, Class III Utility Properties (public utility equipment) pay 3 percent, and Class IV All Other Properties (principally commercial, industrial, and vacant property) pay 16 percent of the tax levy.

The Town Outside Village Fund includes the Building Department, Planning and Environmental Protection Department, and the Highway Division. The total budget for the Town Outside Village Fund is \$39,267,385, of which \$27,348,220 (or 70 percent) is expected to be paid through taxation. The tax levy for the Town Outside Village Fund is paid as follows: 52 percent by Class I Residential Properties, 2 percent by Class II Residential Properties, 8 percent by Class III Utility Properties, and 37 percent by Class IV All Other Properties.

Special Districts that pertain to the Subject Property are the Town of North Hempstead Lighting District, Port Washington Fire Protection District, Port Washington Public Parking District, Port Washington Water District, Port Washington Police District, and Port Washington Garbage Removal District. The Subject Property is not currently connected to or paying taxes to the Water Pollution Control District, but would be connected to, and paying taxes to this district upon project completion. The operating budgets and amounts paid through taxation for each district are shown in **Table 3-37**.

		Amount Paid Through	% Paid Through
Special District	Total Budget	Taxation	Taxation
Town of North Hempstead Lighting District	\$2,445,705	\$2,231,109	91%
Port Washington Fire Protection District	\$2,294,952	\$2,031,531	89%
Port Washington Public Parking District	\$1,258,050	\$338,745	27%
Port Washington Water District	\$7,060,877	\$2,126,171	30%
Port Washington Police District	\$24,204,533	\$22,050,238	91%
Port Washington Garbage Removal District	\$2,605,417	\$2,344,552	90%
Port Washington UFSD	\$163,215,663	\$143,802,224	88%
Port Washington Water Pollution Control District	\$6,936,050	\$5,544,964	80%

Table 3-37 2021 Special District Budgets and Taxation

Sources: Town of North Hempstead Adopted Budget for FY2021, October 29, 2020.

https://northhempsteadny.gov/filestorage/16281/16283/16509/16566/000_TONH_Adopted_2021_Budget_for_Printing.pdf

Port Washington School District Budget 2020 (for 2020-2021 school year)

The Nassau County 2021 budget totals \$3.3 billion, of which \$825.3 million (or approximately 25 percent) is paid through property tax revenue. The County's General Fund is budgeted to collect \$42,189,502 through property taxes, of which 78 percent is paid by Class I Residential Properties, 3 percent is paid by Class II Residential Properties, 4 percent is paid by Class III Utility Properties, and 16 percent is paid by Class IV All Other Properties.

3.15.3 Potential Impacts

3.15.3.1 Demographics

The Proposed Project would introduce 176 new residential units to the Subject Property with a mix of 80 one-bedroom units, 82 two-bedroom units, and 14 three-bedroom units. As described in **Section 3.7**, the Proposed Project would generate a residential population of approximately 378. The current Port Washington population of 15,808 would, therefore, grow by 2.4 percent to 16,186.

3.15.3.2 Payment in Lieu of Taxes (PILOT)

The Applicant is seeking a 20-year Payment in Lieu of Taxes (PILOT) agreement from the Nassau County Industrial Development Agency (IDA). The PILOT would be structured as follows: two years at the current land tax amount with annual increases until payment of full taxes in year 20. See **Table 3-38**.

Year	Start Date	%	Tax Savings	Amount Paid Through PILOT	Full Taxes without PILOT
1	Jan-2023	100.0%	\$1,068,693	\$70,262	\$1,138,955
2	Jan-2024	100.0%	\$2,623,047	\$72,018	\$2,695,065
3	Jan-2025	94.4%	\$2,507,438	\$221,315	\$2,728,753
4	Jan-2026	88.9%	\$2,388,621	\$374,242	\$2,762,863
5	Jan-2027	83.3%	\$2,266,536	\$530,863	\$2,797,398
6	Jan-2028	77.8%	\$2,141,122	\$691,244	\$2,832,366
7	Jan-2029	72.2%	\$2,012,319	\$855,451	\$2,867,770
8	Jan-2030	66.7%	\$1,884,760	\$1,025,899	\$2,910,660
9	Jan-2031	61.1%	\$1,763,210	\$1,207,650	\$2,970,859
10	Jan-2032	55.6%	\$1,642,015	\$1,401,359	\$3,043,375
11	Jan-2033	50.0%	\$1,513,891	\$1,603,832	\$3,117,724
12	Jan-2034	44.4%	\$1,378,562	\$1,815,391	\$3,193,953
13	Jan-2035	38.9%	\$1,235,740	\$2,036,371	\$3,272,110
14	Jan-2036	33.3%	\$1,085,129	\$2,267,115	\$3,352,244
15	Jan-2037	27.8%	\$926,424	\$2,507,980	\$3,434,404
16	Jan-2038	22.2%	\$759,307	\$2,759,334	\$3,518,641
17	Jan-2039	16.7%	\$583,451	\$3,021,558	\$3,605,009
18	Jan-2040	11.1%	\$398,691	\$3,296,443	\$3,695,134
19	Jan-2041	5.6%	\$204,329	\$3,583,183	\$3,787,513
20	Jan-2042	5.6%	\$204,329	\$3,583,183	\$3,787,513
21	Jan-2043	0.0%	\$0	\$3,882,200	\$3,882,200
22	Jan-2044	0.0%	\$0	\$3,979,255	\$3,979,255
23	Jan-2045	0.0%	\$0	\$4,078,737	\$4,078,737
24	Jan-2046	0.0%	\$0	\$4,180,705	\$4,180,705
25	Jan-2047	0.0%	\$0	\$4,285,223	\$4,285,223
26	Jan-2048	0.0%	\$0	\$4,392,353	\$4,392,353
27	Jan-2049	0.0%	\$0	\$4,502,162	\$4,502,162
28	Jan-2050	0.0%	\$0	\$4,614,716	\$4,614,716
29	Jan-2051	0.0%	\$0	\$4,730,084	\$4,730,084
30	Jan-2052	0.0%	\$0	\$4,848,336	\$4,848,336
		Total	28,587,615	76,418,466	105,006,081

Table 3-38 Proposed PILOT Agreement

The Applicant also anticipates receiving a mortgage tax and sales tax exemption from the Nassau County IDA. Given this financial assistance, the Applicant expects to be required to implement a 10 percent affordable/workforce housing component, source only local trades, and use some level of union labor during construction of the Proposed Project.

3.15.3.3 Potential Taxes Without PILOT

If the Proposed Project does not receive a PILOT agreement, the Subject Property would be reassessed during and after construction and would be subject to standard property taxes. The Applicant prepared an estimate of future taxes, assuming a flat tax rate of 461.375 for Town, County, and Port Washington UFSD. If a PILOT agreement is not in place, it is estimated that the Subject Property would generate total Town, County, and Port Washington UFSD in 2023, when the structure is 25 percent complete; \$2,695,065 in 2024 when the structure is 75 percent complete; and \$2,728,753 in 2025 when the structure is 100 percent complete (**Table 3-39**). The Subject Property would also generate taxes for the applicable special taxing districts, including the Town of North Hempstead Lighting District, Port Washington Water District, Port Washington Police District, Port Washington Water District, Port Washington Police District, Port Washington Garbage Removal District and Port Washington Water Pollution Control District.

		Est. Tax Rate per 1,000 Taxable	
Year	Est. Market Value	Assessment	Est. Total Taxes
2022/23	\$352,658,615	461.375	\$1,138,955
2023/24	\$834,482,287	461.375	\$2,695,065
2024/25	\$844,913,316	461.375	\$2,728,753
2025/26	\$855,474,732	461.375	\$2,762,863
2026/27	\$866,168,167	461.375	\$2,797,398

Table 3-39 Estimated Taxes Without PILOT

3.15.3.4 Estimated Municipal Costs

The methodology for determining a cost associated with the proposed development is to use a per capita approach. This approach calculates the current share of municipal expenses paid through property taxes, divide that share by the current municipal population, then multiply that per capita share with the expected population to be generated by the Proposed Project. This approach is conservative because it does not remove fixed costs that likely would not increase due to an increase in population, such as costs associated with the Town Board and Office of the Supervisor.

Using the per capita approach, it is estimated that the Proposed Project costs would be approximately \$42,710 to the Town General Fund, \$181,649 to the Town Outside Village Fund, \$229,965 to Nassau County, and \$128,608 to the Port Washington UFSD, for a combined total of \$582,931 (**Table 3-40**). With a PILOT agreement, at full build-out in 2025,

the Proposed Project would generate an estimated \$221,315 combined to the Town, County, Port Washington UFSD, and applicable special tax districts. The amount paid through a PILOT agreement would increase annually and is anticipated to fully cover the estimated Proposed Project costs of \$582,931 by 2028 when \$691,244 would be paid through the PILOT agreement. Without a PILOT agreement, at full build-out in 2025, the Proposed Project would generate an estimated \$2,728,753 in combined property taxes to the Town, County, and Port Washington UFSD.

Amount Per Project Estimated Project Adopted Paid by Capita **Population** 2021 Budget Taxation **Population** Cost Cost **Town General Fund** \$71,117,284 \$26,047,300 230,531 \$112.99 378 \$42,710 **Town Outside Village** \$39,267,385 \$27,348,220 56,910 \$480.55 378 \$181,649 Fund Nassau County \$3,286,028,475 \$825,263,137 1,356,509 \$608.37 378 \$229,965 **Port Washington** \$167,268,942 14 \$142,178,600 5,472 \$5,884 \$128,608 UFSD¹ **Total Municipal Cost** \$582,931

Table 3-40 Estimated Municipal Costs

Budget Sources: Town of North Hempstead Adopted Budget for FY2021, October 29, 2020. https://northhempsteadny.gov/filestorage/16281/16283/16509/16566/000_TONH_Adopted_2021_Budget_for_Printing.pdf,

Nassau County 2021 Proposed Budget Summary of Fiscal 2021, September 15, 2020.

https://www.nassaucountyny.gov/DocumentCenter/View/30204/2021-Proposed-Summary-Book?bidId=,

145 West Shore Road Fiscal Impact Analyses, 4ward Planning, August 27, 2021.

Population Sources: 2019 American Community Survey 5-year estimates, Town Outside Village Fund per capita cost based on population of the unincorporated portion of the Town of North Hempstead.

Notes:

¹ The per capita cost for Port Washington UFSD is calculated on an adjusted budget that excludes personnel cost, capital outlays, fund transfers, and debt service. Estimated project cost to Port Washington UFSD assumes 2 new students have special needs which would cost an additional \$34,834 per special needs student. See **Section 3.7** for more detail.

3.15.3.5 Job Creation

In addition to the economic benefits realized from local property taxes or a PILOT agreement, there would be additional direct and indirect economic benefits associated with the Proposed Action. An input-output methodology employing IMPLAN software was used to determine the economic impact of the Proposed Action on the local economy. Construction spending would provide a significant benefit to the local economy. This investment would also spur secondary economic benefits. As worker wages and payments to suppliers are spent and recirculated in the area economy, additional jobs, income and revenue would be created in a variety of industries, such as eating and drinking establishments, retail stores, wholesalers, and service providers. In the short-term, it is estimated that an annual average of 567 jobs would be supported by project construction over a two-year period. As shown in **Table 3-41**, This includes 300 direct jobs, 125 induced jobs, and 142 indirect jobs. Overall labor income would be approximately \$37.3 million annually and economic output would be approximately \$96.5 million annually over the two-year construction period.¹¹⁶

¹¹⁶ *Employment* is defined to include full and part time annual average jobs for both employees and self-employed workers. Seasonal workers are accounted for in this definition of employment.

			•
Impact Type	Jobs	Labor Income	Output
Direct Effect	300	\$21,734,218	\$56,418,394
Indirect Effect	125	\$7,822,641	\$18,777,523
Induced Effect	142	\$7,732,491	\$21,289,806
Total Effects	567	\$37,289,350	\$96,485,723

Table 3-41	Temporary	Construction	Period	Economic	Impacts
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The new uses proposed for the Subject Property would also create permanent employment. The 176 residential units would create approximately 7 direct jobs. These direct jobs would further support an additional two induced and indirect jobs. Total labor income would be \$311,582 annually and economic output¹¹⁷ would be approximately \$611,725 annually, as shown in **Table 3-42**.

Table 3-42	Permanent Economic Impacts

Impact Type	Jobs	Labor Income	Output
Direct Effect	7	\$214,692	\$353,375
Indirect Effect	1	\$32,474	\$80,953
Induced Effect	1	\$64,417	\$177,397
Total Effects	9	\$311,582	\$611,725

3.15.3.6 Direct Residential Displacement

The Subject Property currently does not contain any residences or residents. Therefore, direct residential displacement will not occur.

3.15.3.7 Direct Business Displacement

The Subject Property is currently occupied by Bay Aggregates Corporation, a wholesale and supply and landscape company. The company currently has three employees on the site. The direct displacement of one business and three employees is minor and not expected to significantly impact socioeconomic conditions in Port Washington or the Town of North Hempstead.

Direct Effect is production changes or expenditures made by producers/consumers as a result of an activity or policy. These initial changes are a result of this activity or policy (i.e., construction jobs directly related to on-site activity).

Indirect Effect is the impact of local industries buying goods and services from other local industries (i.e., jobs supported from constructionrelated spending).

Induced Effect is the response by an economy to an initial change (Direct Effect) that occurs through re-spending of income by a component of Value Added. Money is recirculated through the household spending patterns causing further local economic activity (i.e., jobs created through household spending of income from direct jobs).

Labor Income includes employee compensation (wages and benefits paid to employees) and proprietor income (profits earned by self-employed individuals).

¹¹⁷ Output is the value of production and is equal to the combination of Labor Income, other property type income (such as corporate profits and interest income) and indirect business taxes plus intermediate expenditures (monies spent purchasing goods and services to create an industry's production).

3.15.3.8 Indirect Residential Displacement

Indirect residential displacement has the potential to occur when a project introduces or accelerates a trend of raising area residential rents to the extent that vulnerable populations could be displaced. Vulnerable populations is typically defined as low-income households living in privately held housing units that are not rent protected. This analysis includes determining if the Proposed Project would add new population to Port Washington with higher average incomes compared to the average income of the existing population.

Per the American Community Survey 5-Year Estimates for 2015-2019, Port Washington has a population of 15,589 with a median income of \$141,667 and average (or mean) income of \$213,564. It is anticipated that the average rents for the market-rate units would be \$4,324 for a one-bedroom unit, \$6,064 for a two-bedroom unit, and \$7,421 for a three-bedroom unit. A range of average incomes for the new tenants can be estimated by assuming that the new households would pay 30 percent of their income on housing. This ratio is based on the Housing and Urban Development definition of cost-burdened families, which states that those paying more than 30 percent of their income on housing may have difficulty affording other necessities. Using these assumptions, it is estimated that households in the market-rate units would have average annual incomes ranging from \$172,960 to \$296,840. See **Table 3-43**.

Unit Type	# of Units	Average Rent	Estimated Average Monthly Income	Estimated Average Annual Income
One-Bedroom	80	\$4,324	\$14,413	\$172,960
Two-Bedroom	82	\$6,064	\$20,213	\$242,560
Three-Bedroom	14	\$7,421	\$24,737	\$296,840

Table 3-43 Estimated Income for Residential Tenants in Market-Rate Units

Notes: Average rents for market-rate were estimated by the Applicant. Market rate estimated average monthly income and annual income assumes that the household pays 30 percent of income on rent.

As noted in the table above, the unit breakdown is anticipated to be 80 one-bedroom units, 82 two-bedroom units, and 14 three-bedroom units. Using a weighted average, it is anticipated that the average annual household income would be \$215,241, which is similar to the current average household income for Port Washington of \$213,564. This calculation does not include the 17 affordable units that would be developed through the Long Island Workforce Housing Act because it will depend on unit size, household size, area median income and affordability level. Because the average household income of Port Washington, significant indirect residential displacement is not anticipated to occur as a result of the Proposed Project.

3.15.3.9 Indirect Business Displacement

Indirect business displacement may occur when a project directly displaces a type of use that directly supports businesses in the area, brings a substantial customer base to the area, or displaces residents or workers who form the customer base of local businesses. As discussed above, the Proposed Project would result in the displacement of one business with three on-

site employees, and no residents. Therefore, indirect business displacement as a result of direct displacement is not expected to occur.

Indirect business displacement may also occur when a project results in substantial new development that is markedly different from existing uses in the area, which could introduce a trend of increased commercial rent. The Proposed Project would introduce a new use to the site, however, as discussed in **Section 3.5**, multi-family uses are found in the primary and secondary Study Areas so the Proposed Project would not be markedly different from existing uses in the area.

3.15.3.10 Adverse Effects on Specific Industries

It may be possible for a given project to affect the operation and viability of a specific industry not necessarily tied to a specific location. The Proposed Project would not be expected to affect conditions within a specific industry, affect a substantial number of workers or residents who depend on the goods or services provided by the displaced business, or result in the loss or substantial diminishment of a particularly important product or service in the area. As discussed above, significant impact due to direct business displacement is not expected to occur because the Proposed Project would result in the displacement of only one business with three employees. The water-based commerce industry would not be impacted because the current use on the Subject Property is not water-based. Therefore, adverse effects on specific industries are not anticipated.

3.15.4 Proposed Mitigation

It is anticipated that the Proposed Action would generate revenue for the Town, County, Port Washington UFSD, and other special tax districts in excess of the municipal costs associated with the Proposed Project through a PILOT agreement by 2028, or through property taxes without abatement. It is also estimated that the Proposed Project would support an annual average of 567 jobs through project construction over a two-year period, and nine permanent jobs at project completion. Significant adverse impacts to fiscal and economic conditions are not anticipated, therefore, no mitigation is proposed.

4

Unavoidable Adverse Effects

All potential significant adverse impacts of the Proposed Action would be mitigated to the maximum extent practicable, consistent with the requirements of SEQRA. Regardless, any development would result in certain unavoidable impacts. Some of these would be short-term impacts associated with the construction, while others would be long-term impacts associated with the physical alteration of the Subject Property.

4.1 Short-Term Impacts

Based upon the analyses provided in this DEIS, there would be several temporary construction-related impacts associated with the implementation of the Proposed Action that cannot be completely mitigated or avoided. These impacts are associated with the typical site preparation and development activities (i.e., grading, excavation for foundations, installation of utilities, and the construction of the Proposed Building and the marina) under the Proposed Action. These impacts would be temporary in nature and would cease upon completion of the construction phase of the Proposed Project, which is anticipated to be 30 months. These impacts include:

- Soils and Topography: Soils would be disturbed by grading, excavation, and mounding activities during site work.
- Soils and Topography: Despite the use of extensive and strategically placed erosion and sediment control measures, minor occurrences of erosion and sediment transport, as well as fugitive dust, may occur.
- > **Air Quality:** There is the potential for minor releases of air contaminants that would occur from construction equipment and emissions of fugitive dust during dry periods, although dust would be almost entirely controlled by covering soil piles and watering down the site.
- > **Transportation:** Operation of construction equipment, trucks, and worker vehicles may temporarily impact traffic in the area of the Subject Property.

- > **Aesthetics:** The visual quality of the area may be temporarily impacted by the presence and operation of construction equipment on the Subject Property.
- Noise: Construction activities may result in increases in noise levels at the Subject Property boundaries. However, construction would only occur during hours permitted by the Town of North Hempstead.
- Ecological Resources: Dredging, filling, and other construction activities within the adjoining waters would include benthic and water column disturbance. Potential disturbance to tidal habitats located farther afield within Hempstead Harbor may also occur, due to water column turbidity, benthic siltation, and noise/vibration impacts from pile installation and other construction activities. The proposed waterfront improvements and work activities would be subject to the conditions, regulations, and prohibitions of the NYSDEC and USACE, which are expected to include seasonal, time of day, and other restrictions on when the work may be conducted.

4.2 Long-Term Impacts

Several long-term impacts associated with implementation of the Proposed Action have been identified, though mitigation measures have been proposed to reduce or eliminate these impacts, to the degree practicable. The long-term impacts listed below are unavoidable, but are not necessarily significant:

- > The Proposed Action would result in the removal of an active industrial use on the Subject Property.
- > The Proposed Action would result in the long-term commitment of the Subject Property as a multi-family residential use with a marina and public pier and promenade.
- > The Proposed Action would involve remediation of subsurface contamination at terrestrial portions of the Subject Property under the Brownfield or similar cleanup program. Same would provide a long-term improvement in subsurface conditions, while eliminating a potential source of harmful contamination to the wetlands and surface water habitats of the adjoining Hempstead Harbor.
- > Existing vegetation would be removed. However, the Proposed Action would include an extensive landscaping plan that would result in a net increase in landscaping and vegetation on-site.
- > The existing structures found within and adjacent to the Subject Property's waters would be removed. New, modern features would be installed, including a marina and a public pier and promenade.
- > Navigational hazards in Hempstead Harbor would be removed.
- > In association with the removal of the existing coastal features, the Proposed Action would result in a net increase in tidal wetland areas.
- The Proposed Action would result in an increase in potable water demand. Additional sanitary wastewater would also be generated, approximately equal to the quantity of water consumption, minus irrigation. These service demands would be addressed by connecting the Proposed Building to the Port Washington Water Pollution Control District and Port Washington Water District infrastructure.

- > The Proposed Action would add a permanent population, including school-aged children, to the community. However, the local school district would be expected to see a net increase in revenue due to site-generated taxes, which would offset the cost to provide educational services to children generated by the Proposed Action.
- > Traffic would be added to the surrounding roadways due to the implementation of the Proposed Action. However, measures would be incorporated into the Proposed Action to mitigate impacts due to project-generated traffic, to the greatest degree practicable.
- > The visual character of the Subject Property and surrounding environment would be altered via the introduction of the Proposed Building, which would contain two parking levels with five residential levels above. The Proposed Building would incorporate a modern and aesthetically pleasing design that utilizes high-end materials and finishes.
- > Operation of the proposed residential use, as well as the proposed marina and public pier and promenade, would generate noise. However, noise levels would be consistent with the surrounding ambient noise conditions.
5

Irretrievable and Irreversible Commitment of Resources

An irretrievable or irreversible commitment of resources refers to impacts on or losses to resources that cannot be recovered or reversed. The Proposed Action would require a commitment of natural and human resources, as well as time. Specifically, the existing onsite improvements would be demolished and removed from the site to accommodate the Proposed Building and other associated project amenities (i.e., the proposed marina and public promenade and pier). Therefore, implementation of the Proposed Action would commit the Subject Property (including land and underwater land) to a multi-family residential use, with marina and other waterfront uses, and would preclude other development from occurring on the Subject Property.

Certain additional resources related to the construction aspects of the development would be committed. These resources include, but are not limited to, concrete, asphalt, steel, lumber and other building materials, paint, water, and topsoil. Mechanical equipment resources would also be committed to assist personnel in construction. The operation of construction equipment would require electricity, water resources, and fossil fuels. Furthermore, the construction phase of the Proposed Project would require the commitment of labor and fiscal resources, as well as time that would not be available for other projects. However, this need for construction workers and fiscal resources can be viewed as a beneficial impact to the construction industry, as approximately 567 jobs (i.e., 300 direct, 125 indirect, and 142 induced) are expected to be created during construction. Upon completion of construction, other labor commitments, such as the services of emergency services, educational, and public works personnel are not expected to substantially increase as a result of the Proposed Action.

In addition, during the operation phase of the Proposed Building, electricity, natural gas, water resources, and fossil fuels would be used for heating, cooling, and other purposes.

Based on the analyses presented in this DEIS, no significant or irretrievable commitment of resources is anticipated as a result of the Proposed Action. In particular, it is noted that the Proposed Action would not result in the irretrievable or irreversible loss of local or regional

plant species, ecological communities, or wildlife populations, as the Subject Property is comprised of a largely unvegetated development that provides poor functional value, supports limited wildlife, and is composed of habitats that are designated by the NYNHP as unranked cultural communities. Rather, the Proposed Action would result in a significant increase in vegetated areas and a nearly one-acre reduction in impervious surface coverage; the Proposed Action would, therefore, result in quantitative and qualitative improvements in vegetated habitat, the removal of existing invasive plant species, and increased wildlife population density and diversity. Further, the Proposed Action would result in a net increase of 6,931± SF of tidal wetland areas, as well as the removal of existing dilapidated structures and debris within the wetlands; these improvements would improve wetland conditions. The Proposed Action would also reduce, to the greatest extent practicable, stormwater runoff into the adjoining Hempstead Harbor, which currently occurs under the existing condition. Therefore, implementation of the Proposed Action would result in quantitative and qualitative improvements to wetland ecological resources as well, and would not result in the irretrievable or irreversible commitment of same.

The commitment of natural and human resources associated with implementation of the Proposed Action would be offset and balanced by the substantial local and regional economic benefits, including net positive annual fiscal revenues and permanent jobs.

Based on the foregoing, no significant irretrievable or irreversible commitment of resources is anticipated as a result of the Proposed Action.

6

Growth-Inducing Aspects

Growth-inducing aspects are generally described as the long-term, secondary effects of the Proposed Action. According to page 122 of *The SEQR Handbook, Fourth Edition* (NYSDEC, 2020), "the growth inducement section of an EIS should thus describe any further development which the proposed action may support or encourage, such as:

- Attracting significant increases in local population by creating or relocation employment, or by providing support facilities or services (stores, public services, etc.); or
- > Increasing the development potential of a local area, for example, by the extension of roads, sewers, water mains, or other utilities."

Based on the Final Scope, the potential for additional commercial development intended to serve the residents of the Proposed Building and the potential for multiple residences along West Shore Road are also to be considered with respect to growth-inducing aspects of the Proposed Project.

The Proposed Project is expected to add approximately 378 people to the hamlet of Port Washington, which has a current population of 15,808 based on the 2019 American Community Survey 5-Year Estimates. This represents an approximate 2.4 percent increase in the population of the hamlet. The projected population is likely to generate some new demand for local retail and service businesses that does not exist with the current industrial use. However, since the Proposed Project is located in a well-developed portion of the Town (between the Port Washington and Roslyn central business districts [CBDs]), it is not likely that the redevelopment of the Subject Property with 176 units, a marina, and pier would induce a substantial amount of new commercial growth within the downtowns.

However, Port Washington's and Roslyn's CBDs would benefit from the generation of residents and a potential pool of employees. While a number of jobs would be directly created during both the construction and operational periods of the Proposed Project, as demonstrated in **Section 3.15**, above, the Proposed Project would also result in indirect and induced jobs, along with indirect and induced labor income (economic output), providing positive economic benefits to the CBDs and the Town, as a whole.

There is a well-established infrastructure (e.g., roadways, gas and electric utilities), existing educational and recreational resources and entertainment opportunities, etc., which are available to serve the projected population within the mature, established communities in the vicinity of the Subject Property. Therefore, the Proposed Project is not expected to induce growth with respect to these facilities.

While the Proposed Action would improve existing infrastructure on the Subject Property, including water and sewer lines, the infrastructure in the surrounding area is already well-developed such that improvements associated with the Proposed Action would not induce additional growth. With respect to existing infrastructure, connections would be made to existing water and sewer lines along West Shore Road to serve the Proposed Project.

Based on the TIS prepared for the Proposed Project, the surrounding roadways are adequate to serve the Proposed Action. As detailed in the TIS (**Appendix J**), the roadways serving the Subject Property would not be adversely impacted to a significant degree by the Proposed Action; nor will the Proposed Action result in any significant change in the rate or severity of accidents in the area. As the proposed traffic mitigation has been designed to allow the roadways to better handle the existing traffic and the projected traffic associated with the proposed development, and no new roads are proposed, the proposed traffic mitigation measures would not induce growth.

Moreover, the proposed development of the Subject Property is in conformance with the *North Hempstead Beach Master Plan* to strengthen and reactivate the east side of the Port Washington Peninsula. Additionally, the redevelopment of the Subject Property, an existing industrial Brownfield site, would invigorate the Subject Property with an updated, modern development introducing a new population to this area, consistent with the plans for the redevelopment of North Hempstead Beach Park, as set forth in the *Shared Vision Plan*.

With respect to the potential for multiple residences along West Shore Road due to the Proposed Project, the extant application involves a change of zone to allow multi-family development on the Subject Property. A change of zone is a legislative action that requires approval by the Town Board. Based on a review of the Town Zoning Map, there are no other parcels located along West Shore Road in the vicinity of the Subject Property that are zoned for multi-family development. Therefore, a change of zone would be required for any application request for such development. Each individual application for a change of zone would require its own environmental review and each would be reviewed and evaluated on its own merits. Thus, the granting of one individual request for change of zone would not have a growth-inducing impact on the area with regard to additional residential development.

7 Analysis of Alternatives

This section of the DEIS contains an analysis of reasonable alternatives to the Proposed Action. Pursuant to the Final Scope, the following alternatives were analyzed:

- > Alternative 1: No Action Alternative
- Alternative 2: Development of the Subject Property under the existing Residence-AAA zoning regulations
- Alternative 3: Rezone to Multiple Residence and develop the Subject Property using only the 2.7-acre upland portion and assuming no access is granted to Lot 1035
- > Alternative 4: Rezone to Waterfront Business and develop the Subject Property with marine-dependent commercial uses
- Alternative 5: Rezone to Planned Waterfront Residential Community (PWRC) and develop the Subject Property with multiple-family dwellings.

A description of each alternative is provided herein. A comparison of the quantifiable impacts of each alternative to the Proposed Action is presented in **Table 7-1** below.

Table 7-1 Comparison of Alternatives

Parameter	Proposed Action	Alternative 1: No Action	Alternative 2: Development under Residence-AAA Zoning	Alternative 3: Development under Multiple Residence using only upland portion of Subject Property	Alternative 4: Development under existing Waterfront Business Zoning	Alternative 5: Development under Planned Waterfront Residential Community Zoning
Type of Development	Multi-family residential/Marina	Existing construction/landscape supply storage	Subdivided single-family residential	Multi-family residential	Waterfront restaurant	Multi-family residential
Number of Residential Units	176	0	4	72	0	40
Maximum Number of Stories	7	1	2	4	1	2
Population (residents) ¹	378	0	15	155	0	87
School-Aged Children ²	14	0	4 ¹	6	0	4
Area of Additional Disturbance (acres)	2.69	0	2.69	2.69	2.69	2.69
Impervious Area (acres)	1.40	2.36	0.48	1.52	1.49	1.42
Domestic Water / Sewage (gallons/day) ⁴	46,650	Note ³	1,200	21,600	10,000	12,000
Solid Waste (tons/month) ⁵	18.00	Note ³	0.80	7.12	1.57	4.02
Traffic Generation (trips)						
AM Peak Hour	62		2	20	C	16
PM Peak Hour	03 77	Note 3	3	29	р 62	20
Saturday Peak Hour	77	NOTE 5	4 4	37 30	62 85	20 16

¹ Based on Rutgers University, Center for Urban Policy Research, Residential Demographic Multipliers

² Based on an estimated multiplier of 0.08 public school aged children per multi-family unit (see Appendix L)

³ The Subject Property is not presently serviced by sanitary sewers. Portable bathrooms accommodate the employees on-site. As the current operations of the existing industrial use and the existing number of employees at the Subject Property are limited, existing water, sewer, solid waste, and traffic generation is negligible.

⁴ Assumes 200 gallons per day per one-bedroom unit, and an additional 100 gallons per day for each additional bedroom; 300 gallons per day per single-family home; and 30 gallons per day per restaurant seat.

⁵ Salvato, J. (2003). Solid Waste Management. In *Environmental Engineering* (5th ed.)

As it relates to the evaluation of alternatives in an Environmental Impact Statement (EIS), NYCRR 617.9(b)(5)(v) states that the EIS must include:

a description and evaluation of the range of **reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor** (emphasis added). The description and evaluation of each alternative should be at a level of detail sufficient to permit a comparative assessment of the alternatives discussed. The range of alternatives must include the no action alternative. The no action alternative discussion should evaluate the adverse or beneficial site changes that are likely to occur in the reasonably foreseeable future, in the absence of the proposed action. The range of alternatives may also include, as appropriate, alternative:

(a) sites;

(b) technology;

(c) scale or magnitude;

(d) design;

(e) timing;

(f) use; and

(g) types of action.

For private project sponsors, any alternative for which no discretionary approvals are needed may be described. Site alternatives may be limited to parcels owned by, or under option to, a private project sponsor.

The analysis of alternatives in an EIS is also discussed on pages 119-120 of the New York State Department of Environmental Conservation, *The SEQRA Handbook* (Fourth Edition, 2020), which offers the following relevant guidance:

31. When is it appropriate to include a discussion of alternative uses or types of actions in an EIS?

Consideration of an entirely different use or action may be reasonable in the following circumstances:

- > The proposed action does not conform to the current zoning of the site, in which case comparison to the use allowed under the existing zoning may be informative;
- > The alternative action being considered may produce significantly fewer impacts while not significantly compromising the overall objective of the proposed action. For example, adding an anchor store to a mix of businesses in a shopping mall may have fewer noise and traffic impacts than would a theater or nightclub; or
- > The project sponsor has a diverse range of development experience and has demonstrated capability to manage different types of development (emphasis added)

28. When is it appropriate to include a discussion of alternative scales or magnitudes of action in an EIS?

Consideration of alternative scales or magnitudes may be reasonable under the following circumstances:

- > Some or all potential impacts of the action can be avoided or reduced by a change in project size,
- > The change in project size does not reduce the project to the point where it will no longer serve its intended function; for example, a communication tower may require a minimum height for effective operation; or
- > The reduction in project size may decrease potential profit **but does not make the project infeasible.** (emphasis added)

29. When is it appropriate to include a discussion of alternative project designs in an EIS?

Consideration of alternative project designs may be reasonable under the following circumstances:

- > Some or all potential impacts of the action can be avoided or reduced by a change in project design, such as a change in traffic ingress/egress to direct traffic away from a quiet residential street to a county road, or a change in the facade of a structure to make it more compatible with its surroundings; or
- > The alternative design may increase the overall project costs, but the increase is not prohibitive. (emphasis added)

33. Is there a way to limit the amount of detail in the EIS while still allowing an adequate comparative assessment of alternatives?

Yes. For most actions, it is enough to use existing information to create reasonably comparable assessments of alternatives. This information may consist of references to existing documents or other studies; projections based on explicitly stated, reasonable assumptions; **or evidence that clearly excludes an alternative from consideration.** (emphasis added)

On the other hand, for projects with many significant impacts, or projects likely to significantly affect public health and safety, it may be reasonable to develop a full discussion of each alternative. This is especially true when comparing alternative technologies, for which fully detailed modeling is often the minimum level of information necessary for a comparative assessment.

In general, a reasonable test of the adequacy of the discussion of an alternative is to ask if the information provided is enough for a decision maker to identify the alternative that minimizes or avoids adverse environmental impacts to the maximum extent practicable.

In consideration of the NYCRR 617.9 regulations and guidance from *The SEQRA Handbook*, Alternatives 2, 3, 4, and 5 do not meet the criteria as a reasonable alternative because these alternatives would not be financially viable for or meet the objectives and capabilities of the Applicant. Therefore, these alternatives would not be reasonably pursued. The analysis below provides a comparison of the alternatives to the Proposed Action based on the table above

and, where relevant, provides additional information as to the financial infeasibility of a given alternative.

7.2 Alternative 1: No Action

According to *The SEQRA Handbook*, "the 'no action' alternative must always be discussed to provide a baseline for evaluation of impacts and comparisons of other impacts. The substance of the no action discussion should be a description of the likely circumstances at the project site if the project does not proceed."

The no action alternative would result in the continuation of existing conditions on the Subject Property, with operation of the existing construction/landscape supply storage facility. No residential redevelopment would occur on any portion of the Subject Property, and all of the existing buildings and structures, including the earth-filled pier/concrete platform, masonry storage building, and remains of a wooden pier, among others, would be maintained. Under the Residence-AAA zoning, the existing operations represent a non-conforming use.

The no action alternative would not require additional disturbance to the Subject Property and would result in no change to impervious surface area, land use, or natural resources. As such, the no action alternative would result in no change to existing conditions in the impact categories analyzed in this Environmental Impact Statement.

Under the no action alternative, remediation activities recommended in the Phase I and Phase II Environmental Site Assessments would not occur, and identified subsurface environmental contamination would continue in its current state and would likely continue to affect the Subject Property and Hempstead Harbor. The Subject Property would not be entered into the New York State Brownfield Cleanup Program, and therefore the planned extensive environmental cleanup of the property would not be realized.

Overall, none of the identified community benefits associated with the Proposed Action would be realized under the no action alternative, such as the transformation of a dilapidated industrial site into a productive residential use in accordance with the *Shared Vision Plan for the Port Washington Peninsula*, the proposed development of affordable housing units, installation of public amenities including the public promenade and pier to serve as the northward extension of the shoreline Hempstead Harbor Trail, improved water quality conditions for Hempstead Harbor, or increased parking for visitors to the North Hempstead Beach Park.

Additionally, the no action alternative would be inconsistent with the Applicant's right to pursue development/redevelopment of the Subject Property and does not meet the objectives of the Applicant. As such, the no action alternative is not a feasible alternative for the Applicant.

7.3 Alternative 2: Retain Existing Residence-AAA Zone

The Subject Property is currently zoned Residence-AAA within the Town of North Hempstead. The Residence-AAA district is a single-family residence district permitting a maximum height of 2.5 stories for single family homes, a minimum lot area of 20,000 square feet, and a lot coverage not to exceed 15 percent of the lot area.¹¹⁸ Development under this alternative would result in the subdivision of the Subject Property into four single-family residential lots and the development of single-family homes on those lots in accordance with the prevailing bulk and dimensional zoning regulations. Consistent with other nearby single-family homes in the Village and Town, it is anticipated that homes developed under this alternative would be an average of approximately 2,500 square feet in size with four bedrooms. See **Appendix O** for a conceptual layout plan for Alternative 2.

Alternative 2 would require the demolition of the existing buildings and structures on the Subject Property, and disturbance to the entire site to ready the area for redevelopment, as the existing industrial use would be entirely replaced with the single-family residential development. Access to the single-family homes would be provided via a new access road off West Shore Road. As detailed in **Table 7-1** above, with the exception of area of disturbance, Alternative 2 would result in a lower intensity of development as compared with the Proposed Action. However, similar to the no action alternative detailed above, none of the identified community benefits associated with the Proposed Action would be realized.

In addition, there are several factors that would make single-family homes extremely difficult to sell in the market, the most prominent of which is the Subject Property's location within the flood zone. As a result, each home would require significant investment, including an elevated first floor as well as flood insurance. Furthermore, the Subject Property requires significant up-front investment to ready the property for single-family residential uses, including an estimated cost of \$9 million for the environmental cleanup, described in detail in Section 3.2. Spreading the Applicant's estimated cost of \$9 million over these 4 singlefamily units yields a per unit cost of \$2,250,000 before any unit construction is undertaken. Assuming a construction hard cost of \$300 per square foot for a 2,500 square foot home plus an additional 20 percent of the hard cost for design and development, ¹¹⁹ the construction cost would equal approximately \$3.15 million per unit, not accounting for the current land costs. Combining this construction cost with an estimated land cost of \$6 million overall (\$1,500,000 per unit), in order to just break even, each unit would have to be sold for a minimum of \$4.65 million per unit. Review of Zillow.com indicates that the sales price of comparable single-family homes in this area ranges from \$900,000 to \$1.7 million, meaning it is economically infeasible for the Applicant to develop the Subject Property in accordance with prevailing zoning. In addition, while the Applicant's portfolio includes single-family development, these projects are limited to developments of 300 units or more.

Accordingly, Alternative 2 is not considered a reasonable alternative to the Proposed Action and would not be pursued by the Applicant.

7.4 Alternative 3: Rezone to Multiple Residence with Reduced Yield

Alternative 3 contemplates the potential redevelopment of the Subject Property following a rezoning to Multiple Residence, considering only the 2.7-acre upland portion of the Subject Property as opposed to the lands under water, and assuming no access is granted to Lot 1035 for the development of surface parking.

¹¹⁸ Town of North Hempstead Town Code, § 70 Article II Residence AAA District

¹¹⁹ Assumptions made based on industry standards and the Applicant's extensive development experience

See **Appendix O** for a conceptual layout plan for Alternative 3.

As Alternative 3 would only involve the upland portions of the Subject Property, this development scenario would not include the significant improvements to the waterfront contemplated under the Proposed Action, including the public promenade, pier, or the marina, meaning the development would not allow for public access to the waterfront or a northward extension of the waterfront pedestrian amenities from North Hempstead Beach Park. In addition, as Alternative 3 assumes that no access would be granted to Lot 1035, this scenario would not allow for development of that lot as accessory off-street parking to serve North Hempstead Beach Park. As such, many of the community benefits associated with the Proposed Action would not be realized under Alternative 3.

Alternative 3 would require the demolition of the existing buildings and structures on the Subject Property, and disturbance to the entire site to ready the area for redevelopment. Access to the residential building would be provided via an access road from West Shore Road. As detailed in **Table 7-1** above, Alternative 3 would result in a marginally higher amount of impervious surface area compared with the Proposed Action and would disturb the full upland portion of the Subject Property.

In addition, Alternative 3 would not be an economically viable alternative given the significant up-front investment required. Spreading the Applicant's estimated cost of the required environmental cleanup of \$9 million over the 72 units yields a per unit cost of \$125,000 before any unit construction is undertaken. Assuming a construction cost of \$360 per square foot of construction for a 1,200-SF apartment in a flood zone, an additional 20 percent of the hard cost for design and development, and an additional \$1.2 million in site investment to service the units with a new sewer line, the construction cost would be approximately \$660,067 per unit. Combining this construction cost with the estimated land cost of \$6 million, in order to just break even, each unit would have to be sold for a minimum of \$743,400 per unit. In addition, based on the Applicant's extensive experience, a condominium unit would need to show double the break-even cost in profit in order to receive financing, meaning each unit would need to be sold for \$1.49 million in order to make the project financially feasible. Review of comparable two-bedroom condominiums for sale in the area on Zillow.com, including a \$1,035,000 unit within the Amsterdam at Harborside near the Subject Property and a \$947,000-unit within the Beacon at Garvies Point across Hempstead Harbor, indicate that it is economically infeasible for the Applicant to develop the Subject Property in accordance with the Alternative 3 parameters.

Accordingly, Alternative 3 is not considered a reasonable alternative to the Proposed Action and would not be pursued by the Applicant.

7.5 Alternative 4: Rezone to Waterfront Business

Alternative 4 contemplates the potential redevelopment of the Subject Property facilitated by a rezoning to Waterfront Business. The Waterfront Business district was established by the Town to "promote, enhance and encourage water-dependent uses, promote environmental sustainability, hazard mitigation and resiliency and increase opportunities for public access along the Town's commercial waterfront."¹²⁰ The district permits a variety of

¹²⁰ Town of North Hempstead Town Code, §70 Article XVIIA Waterfront Business District

commercial uses including storage and dockage of boats, recreational and commercial fishing and boating facilities, restaurants, offices, retails stores, and health clubs, among others. Bulk regulations include a maximum height of two stories and 60 percent lot coverage. This development scenario includes the construction of an approximately 8,000-square-foot waterfront restaurant on the Subject Property and associated surface parking lot with 104 spaces. Pursuant to the Waterfront Business regulations, development under this scenario would require direct waterfront access for boats or would require a special use permit from the Town. See **Appendix O** for a conceptual layout plan for Alternative 4.

Alternative 4 would require the demolition of the existing buildings and structures on the Subject Property, and disturbance to the entire site to ready the area for redevelopment, as the existing industrial use would be entirely replaced by a waterfront restaurant and surface parking area. Access to the parking area would be provided via an access road from West Shore Road. Pedestrian amenities would include a waterfront sidewalk to provide access to the shoreline and the proposed restaurant. As detailed in **Table 7-1** above, Alternative 4 would result in the same area of disturbance as compared to the Proposed Action, 0.9 acres of additional impervious surface area, and similar traffic trip generation levels, with higher trip generation during the Saturday peak hour and lower trip generation during the weekday AM peak hour compared with the Proposed Action.

However, development of a waterfront commercial business on the Subject Property would be contrary to the objectives and capabilities of the Applicant, whose portfolio consists of single-family developments of 300 units or more, multi-family development, and non-waterdependent, larger-scale commercial development. The Applicant does not currently have any water-dependent commercial uses within its existing construction or management portfolio and has no plans or capacity to pursue this type of development product. The waterfront restaurant would also be wholly outside the explicit objective of the Applicant to create a vibrant, waterfront residential community that responds to the market demand for housing opportunities in Port Washington. The affordable housing units included as part of the Proposed Action would not be realized under this development scenario.

Overall, it is the Applicant's opinion that Alternative 4 does not represent the highest and best use for the Subject Property and would not help the Port Washington community capitalize on an opportunity convert a Brownfield site into a productive residential and recreational property. Furthermore, similar to the prior alternatives, Alternative 4 would not be an economically viable alternative, given the significant up-front investment required to remediate the Subject Property, as described above.

Accordingly, Alternative 4 is not considered a reasonable alternative to the Proposed Action and would not be pursued by the Applicant.

7.6 Alternative 5: Rezone to Planned Waterfront Residential Community

Alternative 5 considers the potential redevelopment of the Subject Property following a rezoning to Planned Waterfront Residential Community (PWRC) (Article IB of the Town Code). According to § 70-3.16, the PWRC zoning district was established for waterfront properties to:

A. Promote the most appropriate, desirable, and suitable use of land on sites which are unique due to size and waterfront location, and to preserve open space consistent with orderly development of a site.

- B. Regulate development in such a way as to help preserve the Town of North Hempstead's limited water supply and its surface waters and other aquatic and natural habitat.
- C. Allow for reasonable economic uses of land, consistent with the planning goals for this district.
- D. Encourage innovation and flexibility in the design and development of waterfront property for residential use, while ensuring that potential environmental impacts and other adverse impacts are minimized.¹²¹

Bulk regulations include a maximum height of two stories and 26 feet, with a minimum aggregate lot area of seven acres, and a minimum aggregate lot area per dwelling unit for multiple-unit developments of 7,500 square feet.

A rezoning of the Subject Property to the PWRC zoning would facilitate the development of a multi-family residential building with two residential floors and total yield of 40 units. A surface parking lot would be constructed adjacent to the residential building accommodating 80 parking spaces. See **Appendix O** for a conceptual layout plan for Alternative 5. Given the smaller number of units compared with the Proposed Action, as detailed in **Table 7-1** above, with the exception of area of disturbance, Alternative 5 would result in a lower intensity of development as compared with the Proposed Action. However, many of the identified community benefits associated with the Proposed Action would not be realized under this alternative, including public access to the waterfront through the construction of a public pier and promenade, the marina use, and the accessory parking to support the adjacent uses at North Hempstead Beach Park.

Additionally, similar to the other alternatives detailed above, Alternative 5 would not be an economically viable alternative given the significant up-front investment required for the Subject Property. Spreading the Applicant's estimated cost of the required environmental cleanup of \$9 million over the 40 units yields a per unit cost of \$225,000 before any unit construction is undertaken. Assuming a construction cost of \$360 per square foot of construction for a 1,225-SF apartment in a flood zone, an additional 20 percent of the hard cost for design and development, and an additional \$1.2 million in site investment to service the units with a new sewer line, the construction cost would be approximately \$784,200 per unit. Combining this construction cost with the estimated land cost of \$6 million, in order to just break even, each unit would have to be sold for a minimum of \$934,200 per unit. In addition, based on the Applicant's extensive experience, a condominium unit would need to show a 2X profit in order to receive financing, meaning each unit would need to be sold for \$1.87 million in order to make the project financially feasible. Review of comparable 1-bedroom condominiums for sale in the area on Zillow.com, including a \$625,000 unit within the Harbor View development located near the Subject Property and a \$632,500 unit within the Beacon at Garvies Point across Hempstead Harbor, indicates that it is economically infeasible for the Applicant to develop the Subject Property in accordance with the PWRC zoning.

Accordingly, Alternative 5 is not considered a reasonable alternative to the Proposed Action and would not be pursued by the Applicant.

¹²¹ Town of North Hempstead Town Code, §70 Article 1B Planned Waterfront Residential Community

8

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